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LOS ANGELES-LONG BEACH HARBOR AREAS REGIONAL CULTURAL HISTORY

Los Angeles County, California



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LOS ANGELES-LONG BEACH HARBOR AREAS REGIONAL CULTURAL HISTORY

Prepared for: U.S. Army Engineer District

Los Angeles, California

Submitted by: Dr. Lois J. Weinman

April 1978



INTRODUCTION

Purpose of the Survey

* This survey was conducted to identify and locate cultural resources in the Los Angeles and Long Beach Harbor areas that might ultimately be affected by a project. The survey was carried out in compliance with the National Environmental Policy Act (PL 91-190); the Archeological and Historical Preservation Act (PL 93-291); and Executive Order No. 11593, May 15, 1971, "Protection and Enhancement of the Cultural Environment*. A second purpose of this survey was to propose that qualified historic and archeological resources be nominated for inclusion in the National Register of Historic Places, in the California State Landmark Program, and as Los Angeles Historic-Cultural Monuments.

Project Location

The field examination extended from the headlands at Point Fermin, within the San Pedro, Middle, and Long Beach breakwaters. to a line that extended shoreward to Seal Beach Boulevard. The study extended inland northwest along Seal Beach Boulevard to the Pacific Coast Highway and northeast to Anaheim Street to the Harbor Freeway, south on the Harbor Freeway to Gaffey Street, south on Gaffey Street to Hamilton Avenue, west on Hamilton Avenue to Alma Street, and west to the ocean... A map comprised of portions of three USGS 7.5-minute-series topographic quadrangles (Long Beach, Torrance, and San Pedro) accompanies this report. Of the total 27,103 acres in the survey area, the underwater area covers 13.484 acres and the land area covers 13.619 acres. Inland resources were investigated only when they had a direct relationship to harbor history. Consequently, Spanish ranch houses, even when belonging to the owners of land along San Pedro Bay, were considered peripheral to this study.

Organization of the Report

The brief cultural histories of the harbors provide chronological settings into which the

more intensive descriptions and histories of the individual resources may be placed and thus better understood. The names of the historical resources and the numbers that identify them on the site map appear in parentheses within the text as an aid to their identification. Photographs and additional maps are found throughout the report.

The cultural resource sites are presented in a separate section. Five of the sites are already on the National Register of Historic Places and five others are State Registered Landmarks. Of these 10 sites, several received but brief mention. Others such as Timms Point received more space because a study of the resource helped complete the understanding of an important era of harbor history omitted in the brief regional cultural history. This logic was followed throughout the section. Eight sites were nominated for the National Register of Historic Places and six for State Registered Landmarks.

Personnel Conducting Survey

This survey of archeological and historical resources was conducted by Dr. David Williams, Project Director; Dr. Lois Weinman, Principal Investigator; Mr. Richard Speed, Research Assistant; Dr. Gary Stickel, Marine Archeologist; and Dr. John Pohlman, Consultant.

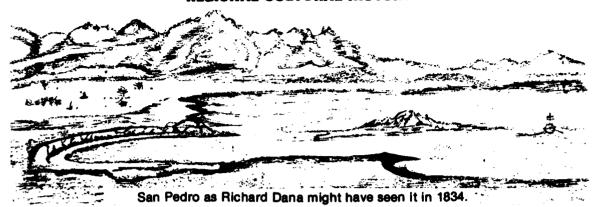
CONTENTS

INTRODUCTION
REGIONAL CULTURAL HISTORY
San Pedro Bay
Los Angeles Harbor
Spanish Exploration and Settlement Through Early American Occupancy
New San Pedro at the Slough to the Fight for a Deepwater Port
Los Angeles Harbor in the 20th Century
Long Beach Harbor
•
CULTURAL RESOURCES IN THE HARBOR AREA
Archeological Resources
Underwater Resources
Cultural Resource Sites in the Harbor Area
Point Fermin Lighthouse
San Pedro Breakwater and Angels Gate Lighthouse
Fort MacArthur, Upper Reservation Site
Korean Friendship Bell
Battery Installations
Sentry Dog Cemetery
One Hundred Varas Square
Los Angeles Municipal Warehouse No. 1
Harbor View Memorial Park, Old St. Peter's Episcopal Church Municipal Fish Market
Dodson Residence
Timms Point and Landing
Municipal Ferry Building
Fireboat 2 and Firehouse 112
Vincent Thomas Bridge
Terminal Island Schoolhouse
S. S. Catalina
Site of Home of Diego Sepulveda
Berth 145, Los Angeles Harbor
Berth 158, Pier A, Oldest Wharf, Los Angeles Harbor
Badger Avenue Bascule Bridge
Southern California Edison Company on Terminal Island
Hughes Flying Boat H-K 1 and Drydock-Hangar
Craig Shipbuilding Company, Long Beach
Looff Carousel
Old Whaling Station at Portuguese Bend
Drum Barracks: Officers' Quarters and Powder Magazine
General Phineas Banning Residence
St. John's Enisconal Church

MAPS

No.		Page
1	(Deleted)	
2	Rancho San Pedro, 1857	3
3	Rancho Los Palos Verdes	4
4	California from Point Fermin eastward to San Gabriel River, 1859	9
5	Inner bay, San Pedro, 1886	11
6	Inner bay and salt flat, circa 1900	12
7	San Pedro and bay with proposed improvements	12
8	Artist's rendering of Terminal Island and San Pedro in 1898	13
9	San Pedro Harbor, California	27
10	Long Beach moles	44
11	Cultural resource sites	55
12	Fort MacArthur, Upper Reservation	64
13	One Hundred Varas Square	68
14	Timms Landing	75

REGIONAL CULTURAL HISTORY



SAN PEDRO BAY

The log of Juan Rodriguez Cabrillo, October 8, 1542, provides the first recorded description of San Pedro Bay:

The Sunday following, the 8th, they came to the mainland in a large bay, which they named 'Bahia de los Fumos' on account of the many smokes they saw there. Here they engaged in intercourse with some Indians they captured in a canoe. The bay is in 35° latitude; it is an excellent harbor and the country is good with many plains and groves of trees (ref. 1).

The local inhabitants who met Cabrillo were probably the Gabrielino Indians mentioned in the section on the early history of the harbor area.

Sebastian Vizcaino sailing along the coast of Upper California sighted the large crescent in 1602 and reported on the "very good ensenada with shelter from the northwest, west and southwest winds with a small island in it" (ref. 2).

Catalina Island protects San Pedro Bay from the big swells of southwest storms, and Point Fermin and the San Pedro Hills protect the bay from southwest and northwest gales.

The small island Vizcaino sighted, later named Deadman's Island, lay about a haif mile southeast of a promontory on the western San Pedro shore. To the north a convolution of sand dunes called Rattlesnake Island protected the slough or inland harbor from ocean waves. Sand spits dotted the bay; some at low tide were so visible they were later called islands, such as Mormon Island. The Los Angeles River, when discovered by the Spaniards, spread out over a large marshy area along the coast. In 1825 a flood caused the river to cut a channel, join with the San Gabriel River, and flow forcefully into the sea. Many small rivulets, deprived of a meandering water supply, dried up, and the regular forests of trees along the south coast disappeared. Ships such as Cabrillo's which sought the shelter of the San Pedro Hills would have found the channel between Deadman's Island and the shore only 3 feet deep at low tide; the same depth prevailed at the entrance to the slough or inner harbor.

LOS ANGELES HARBOR

The history of the harbor falls into three periods: Spanish exploration and settlement through early American occupancy (1542-1850); new San Pedro at the slough to fight for a deepwater port (1851-1899); and 20th century Los Angeles Harbor. An inventory of cultural resources is included in this report. Resources are numbered according to their locations on the site map at the beginning of the resources section and are identified by name and number when referenced in this section of the report.

Spanish Exploration and Settlement Through Early American Occupancy

Strict mercantilistic control guided Spanish rule in California. Spain allowed but two supply ships from San Blas a year to call at what they named the "Embarcadero San Gabriel" (ref. 3). Goods sent by Spain's House of Trade were exchanged for the hides and tallow of the inland missions: San Gabriel Archangel, founded in 1771; San Juan Capistrano, 1797; and San Fernando, 1797. Ships anchored a mile or so off shore and loaded from lighters. Captain William Shaler brought a Yankee ship into port in 1805 and observed that the Spanish officials up and down the coast were quick to confiscate cargo (ref. 4). Smugglers trading for sea otter pelts as well as cattle hides and tallow were attracted to San Pedro because it was remote from presidios and quards.

The Spanish regime granted two large rancho land grants, the Nieto and the Dominguez, that extended to the sea at San Pedro Bay. The Dominguez grant, called Rancho San Pedro, included Rattlesnake Island and the other sandspits along the water's edge (ref. 5) (map 2).

The independent Mexican Government replaced Spain in April 1822. When the liberal faction won the elections of 1824, it repealed restrictive laws against foreign trade. Although the ranchos inland from San Pedro Bay produced no other exports than hides and tallow, the hide droghers from Boston were soon fitting out ships for the California trade (ref. 6). Richard Henry Dana crewed for Bryant, Sturgis and Co.'s Pilgrim sailing from Boston in 1833. He wrote in the following year of hauling the company's goods up the muddy bluffs at San Pedro and rolling the hides down the steep bluffs to the small boats in which they were carried to the ships anchored a mile offshore. In describing a small adobe on the hill used as a storehouse and lodging place, he wrote:

...there was no sign of a town...What brought us into such a place, we could not conceive...we lay exposed to every wind that could blow, except from the northwest...I

also learned to my surprise, that the desolate-looking place we were in was the best place on the whole coast for hides. It was the only port for a distance of eighty miles, and about thirty miles in the interior was a fine plane country, filled with herds of cattle, the center of which was the Pueblo de Los Angeles—the largest town in California—and several of the wealthiest missions: to all of which San Pedro was the seaport (ref. 7).

The hill itself was within the 40 acres of what is now called the U.S. Government's Lower Reservation at Fort MacArthur and the bluff to the sea was some 80 feet in height.

By the time of the American conquest in 1846 and as American occupation began, land ownership along the harbor had changed from the time of Spanish rule. Rancho Palos Verdes, formerly a part of the Dominguez grant but now belonging to the Sepulveda family, took in all of present-day San Pedro. (No. 19, Homesite of Diego Sepulveda.) (map 3) The boundary line between Rancho Palos Verdes and the Dominguez Rancho passed nearly north and south through the Wilmington Lagoon. The Mexican Government retained 500 varas square of the Palos Verdes Rancho on the waterfront as a public landing place or embarcadero (ref. 8). Later the United States set aside these same 42 acres, and in 1888 President Grover Cleveland designated it an unnamed military reservation. Near the southwest corner of the embarcadero, the Mexican Government designated 100 varas square for permanent houses. At the time of American occupation, Juan Alexander and John Temple acquired the square (1.77 acres) and in 1849 had the only general store and did most of the forwarding business from the port to Los Angeles by cart and oxen (ref. 9). (No. 8, One Hundred Varas Square.)

Diego Sepulveda meanwhile constructed a wharf on a point of land just below the government embarcadero and at the water's edge from which he ran stage coaches to Los Angeles. Timms Point, as the promontory was

Postake a man captrondo Wall inner Way of San Pedro 41/15 Map 2. Rancho San Pedro, 1857 Source: **Huntington Library**

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Map 3. Rancho Los Palos Verdes

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Source: **Huntington Library** later known, got its name from August W. Timms who had come to Los Angeles as an agent for several San Francisco firms. He towed in the hulls of two ships that had gone aground, and as they in turn attracted sand and silt, a jetty formed to give protection to his docks. (No. 13, Timms Point.) Timms Point provided docks for Los Angeles in the first years of American occupation while competing stage lines belonging to Sepulveda, J. L. Tomlinson, Timms, and the firm of Alexander & Temple carried goods and passengers back and forth between os Angeles and San Pedro.

A young man from Delaware named Phineas Banning changed harbor history when he bought Temple's share in the Alexander & Temple partnership and began a vigorous expansion program. In 1857 he increased their rolling stock to 15 stages and 48 wagons and moved their dock business from Timms Point to a landing and new wharf almost 4 miles northeast at the head of a slough. Banning purchased 2,400 acres inland of his new dock from Manuel Dominguez, named it New San Pedro, but later had it legally registered as Wilmington. Trading vessels as before anchored in the open roadstead of San Pedro Bay, but now the lighters followed one of the shifting channels in past Deadman's Island and finally were towed over a bar at the entrance of the slough to Banning's landing. Banning & Alexander soon monopolized freighting to Los Angeles, and Banning entrepreneured the Los Angeles-San Pedro railroad in 1869. (No. 29, Phineas Banning Residence) No competing line reached the harbor till the 1890's.

Captain Amos Fries of the U.S. Army Corps of Engineers left us a clear description of the unimproved inner harbor as it was in the 1850's (map 4):

Wilmington Lagoon begins near Deadman's Island, a sand, clay and rock promontory some fifty feet high and less than two acres in extent, located about three-quarters of a mile nearly due east of the Government Reservation. The Lagoon is generally low land, overflowed at high tide, but largely mud-flats at low tide,

extending northward and eastward distances of three to four miles from Deadman's Island. In all there are some 1,360 acres in the Lagoon. About one mile north of Deadman's Island there were two or three channels leading to Wilmington having from two to six feet of water at low tide, though across the present entrance, west of the island, there were generally depths of only one to three feet (ref. 10).

New San Pedro at the Slough to the Fight for a Deepwater Port

Between the 1850's and the turn of the century San Pedro responded like a reflex community to the growing population and commerce of southern California. In Los Angeles sympathy for the Confederacy ran high during the Civil War, and although the U.S. Army had a supply warehouse in New San Pedro dating from 1858, the army spent \$1 million on a barracks in New San Pedro and stationed over 4,000 soldiers there to insure the loyalty of southern California. (No. 28, Drum Barracks.)

As Los Angeles commerce picked up in the 1850's, harbor traffic did too. A lighthouse was authorized for Point Fermin as early as 1858, but construction did not begin until 1874. (No. 1, Point Fermin Lighthouse.) By 1868 demand for lumber in the southland and a general increase in coastal trade caused Los Angeles businessmen to ask the U.S. Army Corps of Engineers to make a study of the inner harbor. The Corps did so and Congressman S. O. Houghton secured an appropriation for the recommended improvements. By 1871 work had begun on the two jetties, and in 1880 the U.S. Army Corps of Engineers was able to report on a deepened and reliable channel leading up to the Wilmington landing. According to the report:

This improvement consists in controlling the tidal currents by jetties, so as to make them excavate a channel in the sandy bed of the estuary. The original



Deadman's Island, a rocky promontory about 50 feet high and less than 2 acres in area, buttressed two jetties in 1893. Ten graves, some marked by wooden crosses, gave the island its name. The island was removed in 1929 when the main channel was widened to 1,000 feet.

depth was one foot, sometimes two feet. There is now a welldefined and well-controlled channel of a trifle less than ten feet (ref. 11).

The Corps went on to cut through the reef at the entrance to the harbor and increase the 150-foot width to 250 feet. Federal funds for harbor improvements were difficult to obtain; work continued, however, and by 1893 the east jetty extended southward from Rattlesnake Island beyond Deadman's Island to the 3fathom curve. A west jetty went out from Timms Point towards Deadman's Island. By this date Government allocations for improvement of San Pedro Bay had run out, and although port facilities were now adequate for coastal shallow-draft vessels, dreams of a deepwater harbor for oceangoing ships were as yet unfulfilled. At this stage the "empire builders" assumed major roles in formulating plans for a deepwater port for southern California (maps 5 through 7).

Railroads were a primary instrument of business consolidation in the late 19th century. By the 1890's San Pedro was already feeling the excitement of railroad competition for exclusive access (i.e., control of) a deepwater port facility. As an inducement to the Southern Pacific to put Los Angeles on its main line, Los Angeles turned over the Los Angeles-San Pedro Railroad to the "Big Four" (Collis Huntington, Leland Stanford, Mark Hopkins, and Charles Crocker) in 1870. Southern California grew as a result, but meanwhile transport at San Pedro fell to and was monopolized by the Southern Pacific and by General Banning's lighterage business. In 1885 the Santa Fe Railroad built west and into Los Angeles, which soon contributed to the influx of population known as the "Boom of the Eighties". In 1891 the Los Angeles Terminal Railway purchased Rattlesnake Island from the

Dominguez heirs for \$250,000 (ref. 12). A line was constructed down the east side of the Los Angeles River and across to Rattlesnake Island; the name of the island was changed to Terminal Island (the "end of the line"). The Terminal Railway threw up a wharf on the west end, calling it East San Pedro. The new line, within waving distance of the Southern Pacific yards, thus controlled all cargo on the east side of the steadily improving main channel.

Meanwhile, the Southern Pacific had acquired a right-of-way and a terminal permit to extend its Los Angeles-San Pedro Railroad on pilings across the Wilmington Lagoon and over the shallow water on the west side of the main channel to the area around old Timms Point. In the 1880's, tracks and wharves covered the tidelands up to about present-day First Street (ref. 19). As in the 1850's, all the shipping was back in the outer harbor and the Wilmington docks went out of business. Concurrently, competition between the transcontinental lines from the East to Los Angeles precipitated a rate war, which in turn brought about an unprecedented inflow of people who stayed and bought real estate. The inglorious collapse following this short-lived commercial boom prompted Los Angeles civic leaders to form a new Chamber of Commerce in 1888.



In 1881, Southern Pacific extended its Los Angeles-San Pedro Railroad on pilings across the Wilmington Lagoon, over shallow water, to a new terminal near the old Timms Landing.

U.S. Army Corps of Engineers, Los Angeles District



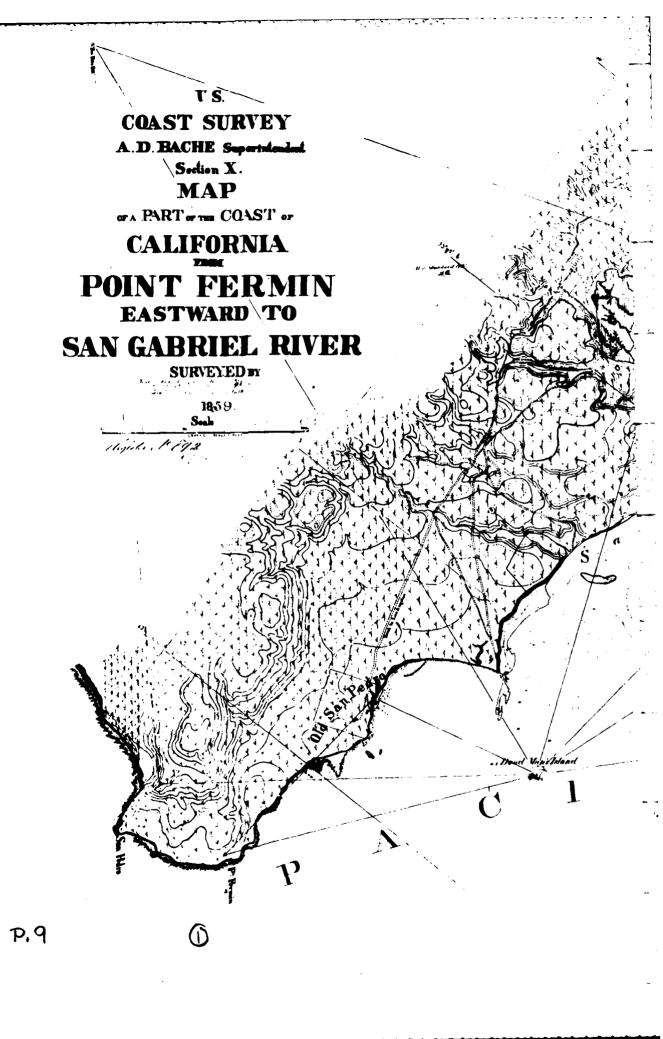
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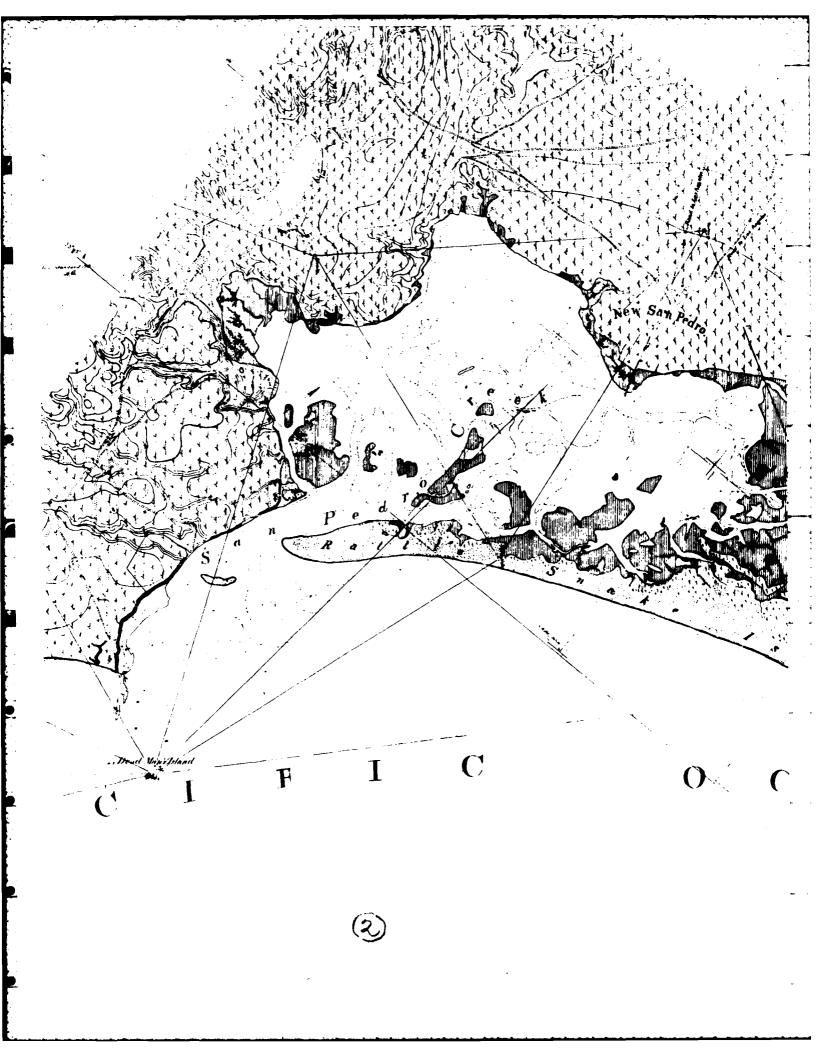
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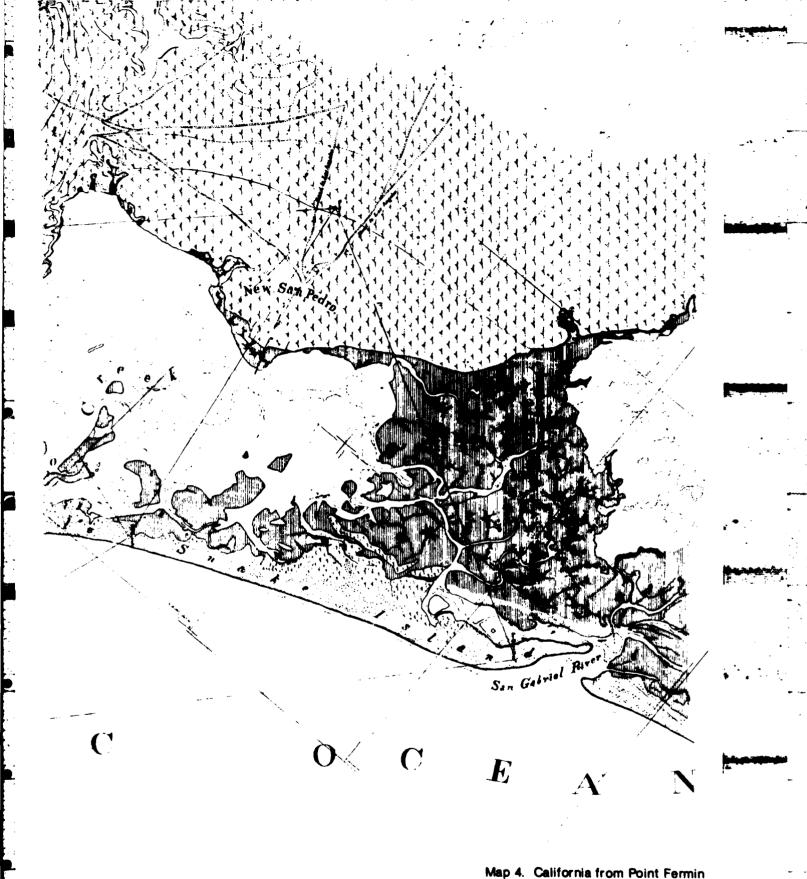


In 1857 Phineas Banning attracted most of the dock business to his new landing at Wilmington on the slough. Early view of Wilmington Harbor.

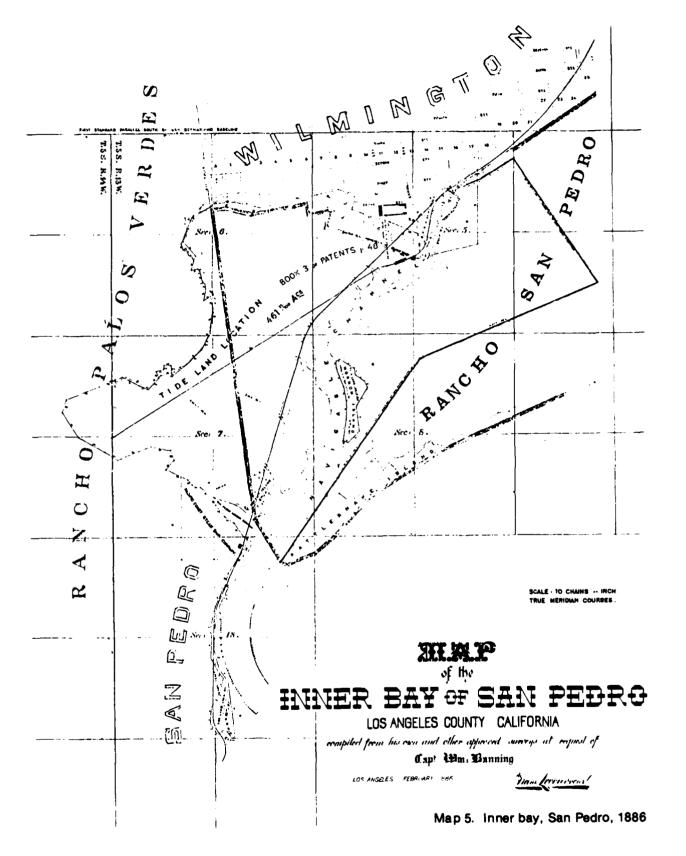
Edward Houck Collection

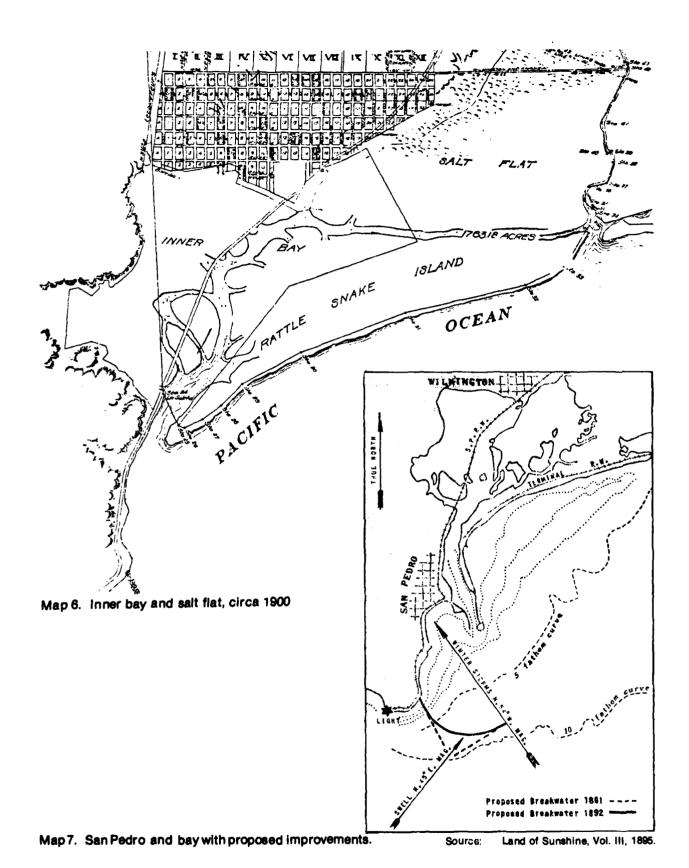


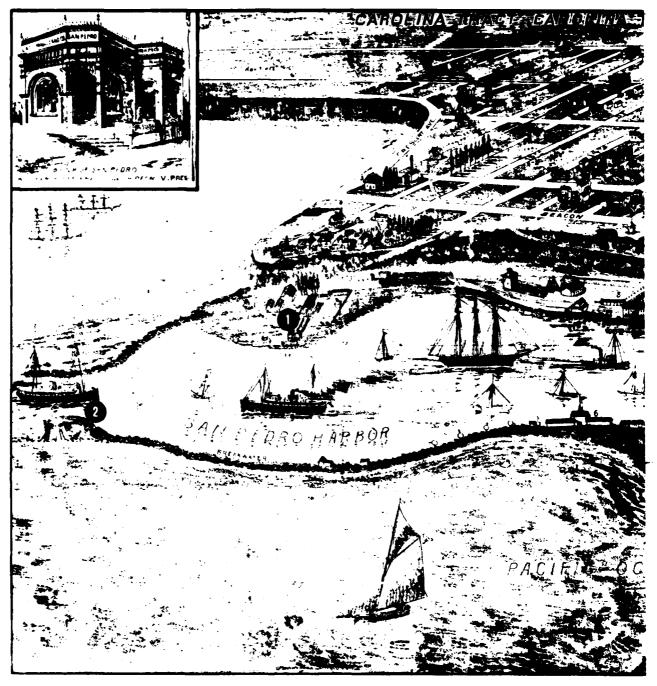




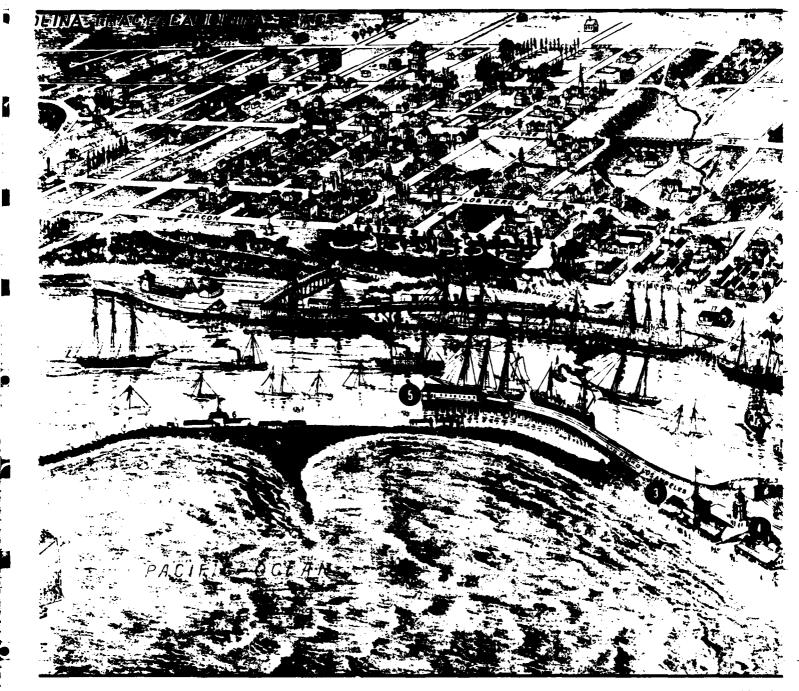
Map 4. California from Point Fermin eastward to San Gabriel River, 1859





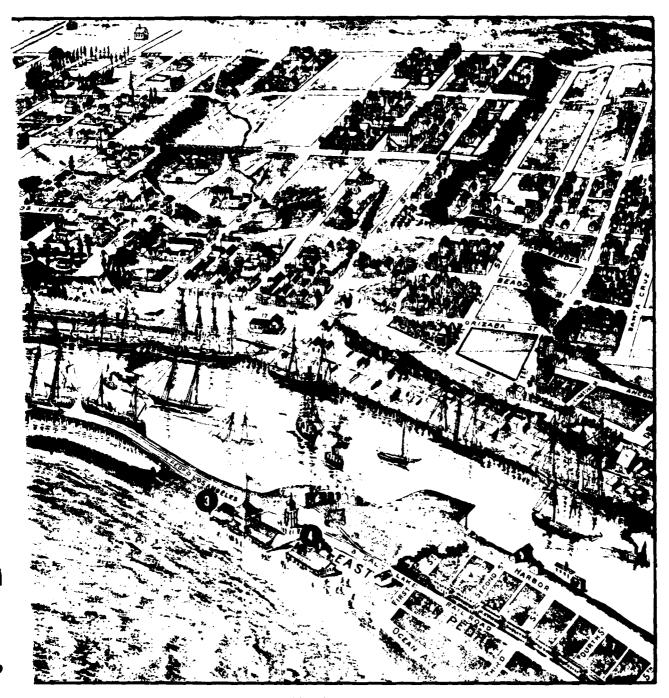


Source: Bancroft Library



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Map 8.

Artist's rendering of Terminal Island and San Pedro in 1898. The Government Reservation lies above the cliffs at the end of Crescent Avenue, a jetty from Timms Point (1) ends across from Deadman's Island (2), and resort hotels and bathhouse (3 and 4) front Brighton Beach while the Salt Lake Railroad runs behind them to its terminal (5) on the east bank of the main channel. This competition prompted Collis Huntington, President of Southern Pacific Railroad, to build a mile-long wharf at Santa Monica Bay and lobby for a federally funded breakwater there instead of at San Pedro.

San Pedro had experienced its usual reflex reaction to the Los Angeles boom of the 1880's, most notably "immense imports of raw material, especially lumber" (ref. 13). A new town spread out partly on the bluff and partly bordering the bay, with the result that the City of San Pedro was incorporated in 1888 (map 8).

The new Los Angeles Chamber of Commerce was just in time to take the lead in the conflict surrounding the second phase of railroad rivalry at the port. Los Angeles was losing the international trade, particularly trade to the Orient, which was carried almost entirely by foreign ships, to other ports on the Pacific coast.

Business interests demanded a deepwater port. They intensified pressure on the U.S. Congress to supply the Army Corps of Engineers with adequate funds to build a breakwater in the outer harbor (map 7). The Southern Pacific vigorously opposed an improvement that would generate business which it could not itself monopolize. Because of the Terminal Railway's access to San Pedro, Collis Huntington worked to have the Federal Government construct a deepwater port at Santa Monica Bay where the Southern Pacific monopolized all railroad access. After a bitter fight led by Senator Stephen M. White in the U.S. Senate, Congress finally authorized a federally constructed breakwater for San Pedro in 1896. (No. 2, San Pedro Breakwater and Angels Gate Lighthouse.) Los Angeles closed the 19th century with the promise of a harbor free of railroad monopoly and able finally to accommodate deep sea commerce.

Los Angeles Harbor in the 20th Century

One consequence of the continuous economic and technical change at Los Angeles Harbor has been the disappearance of the remains of the social past. Terminal Island is a case in point. In the late 19th century, Los Angeles Terminal Railway had the incidental effect of opening up the island to resorts, homes, and hotels. A community called Brighton Beach appeared, and a collection of squatters huts served fishermen and artists. After heavy dredging around the turn of the century, Brighton Beach was isolated by a mile of dredged material between it and the sea; a

mid-island street named Seaside Avenue is all that remains of this once flourishing beach community (ref. 14).

A new phase of the island's social history began in the 1920's with the building of clusters of homes for ethnic cannery workers near Fish Harbor. Upon the outbreak of World War II, it was rumored that Japanese cannery workers and fishermen might serve the Japanese Navy in the Los Angeles Harbor area. This fear and unsubstantiated reports ultimately led General De Witt to order a "voluntary" departure of the Japanese. On March 27, 1942, preliminary to forced relocation of all Japanese-Americans on the Pacific Coast to wartime camps, all the Japanese left Terminal Island, Mexican, Italian, and Yugoslav workers also departed with short notice to make way for military expansion on the island during the war. (No. 17, Terminal Island Schoolhouse.)

Historians are making great progress in determining our social past, but they will find few extant resources in the harbor area. Those searching for landmarks in storage and cargo handling will also have limited success

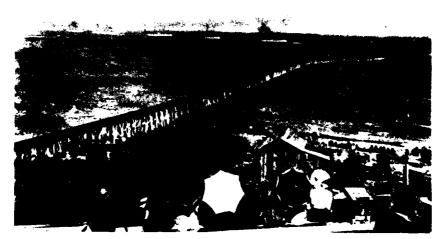
While the San Pedro breakwater was under construction (1899-1912), a number of important moves were made by Los Angeles and the City of San Pedro. The State holds title to all submerged lands but allows incorporated cities to grant leases of up to 50 years (ref. 15). San Pedro leased out adjacent submerged lands to insure immediate development by private capital. One lease of 150 acres, which lay between the Government Reservation and Timms Point, went to Randolph H. Miner, who promptly began to fill and bulkhead the property. It ultimately became the property of the Outer Harbor Dock and Wharf Company. The other lease, which was for 60 acres, went to Henry E. Huntington, nephew of the railroad magnate who did so much to prevent development of San Pedro into a deepwater port.

Los Angeles civic leaders meanwhile worked to make the harbor an integral part of their city and to create adequate land and facilities for commerce and navigation. The first of these objectives was accomplished by annexing a strip of land a half-mile wide connecting Los Angeles with the harbor area.



Beacon Street. San Pedro, looking north. circa 1900.

Title Insurance and Trust Company



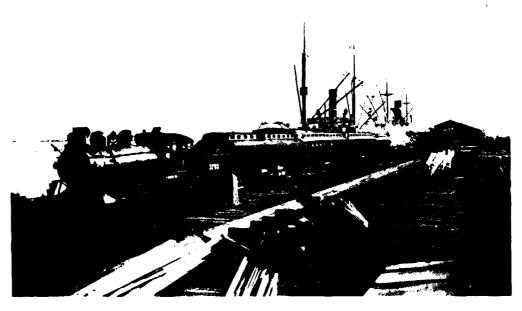
In 1908, the partially completed San Pedro Breakwater offered partial protection to the Great White Fleet sent around the world by President Theodore Roosevelt.

Title Insurance and Trust Company



The Japanese and other immigrant groups initiated the fishing industry in and near San Pedro Bay. Young Japanese began diving for abalone off Whites Point, shown here in 1901, then expanded to fishing between Whites Point and San Pedro Bay in 1906.

Courtesy of Arthur Almeida



Train on the outer dock.

Now contiguous to the corporate towns of San Pedro and Wilmington, Los Angeles was legally in a position to bargain for annexation and pledged such inducements as dredging, draining, and water rights. In 1908 the citizens of the two harbor cities voted to consolidate with Los Angeles, but nearby Long Beach clung to its independence. Looking forward to control of the port, the Los Angeles City Council created a Harbor Commission charged with the duty of planning and operating the harbor in December 1907.

Clarence Matson, who was working closely with the Board of Harbor Commissioners and who became its secretary in 1912, later wrote about control and planning when he said:

The Southern Pacific had constructed wharves along the west side of the channel, while the Terminal Island and Salt Lake Line had built wharves on Terminal Island, which had become known as East San Pedro. The chief commodity was lumber, brought down from the northwest by lumber schooners drawing from sixteen to eighteen feet of water... As the breakwater construction advanced, the Los Angeles Chamber of Commerce, recalling that one of the objectives for which it was organized was to foster the commerce of California, began to look for other ways to do this fostering, and this led further (sic) studies for the improvement of the so-called inner harbor (ref. 16).

As conceived by the Harbor Commission, the new harbor would embrace the old Wilmington mudflats, the coastal sand spits, and the low-lying islands. Aggressive citizens working with the U.S. Army Corps of Engineers convinced Congress to create a Federal Harbor Line Board. This board employed E. P. Goodrich, an experienced harbor designer, as consulting engineer. Channels and turning basins were created by dredging and

occasional blasting, and a whole new inner harbor and an improved outer harbor came into being (ref. 17) (map 9).

The board also challenged tidelands claims and the Southern Pacific's right-of-way along the shore. At the time, Southern Pacific and Pacific Electric tracks covered practically all the flat space below the San Pedro bluff from about present-day Seventh Street south. The only way to get beyond the tracks to the outer harbor was to ascend Timms Point bluff. Litigation took years, but eventually most of the waterfront was awarded to the State. Timms Point disappeared in the work of excavation and fill necessary to accommodate land traffic along the outer harbor. The Board of Public Works condemned all the Timms Point property and cutting began. The original plan called for cutting down Timms Point to sea level to make space for warehouses. Although the cutting was not this drastic, dredging, fill, and leveling have totally obscured what used to be the important point of land jutting out into the channel.

Meanwhile, Los Angeles had voted for \$3 million in harbor improvement bonds. Funds were available to the contractors starting in 1912 and the first unit of municipal harbor facilities was completed by 1914. Improvements included a wooden viaduct that carried Harbor Boulevard down the bluff at Timms Point to sea level, San Pedro's first municipal pier, and a Municipal Wholesale Fish Market at the head of the Southern Pacific slip. (No. 11, Municipal Fish Market.) Dredging on Fish Harbor was undertaken in 1914, and the next year construction began on the huge Municipal Warehouse No. 1, as well as numerous transit sheds and ferry terminals. (No. 9, Municipal Warehouse No. 1.)

On July 2, 1913, a harbor newspaper carried a story entitled "San Pedro Off Marine Map" (ref. 18). Under a new arrangement for the collection of customs, the name San Pedro had been wiped off the official marine map as a port of entry, and the Port of Los Angeles had replaced it. Mariners took several decades to get used to the change.

When inner harbor improvements were initiated, Wilmington property owners voted to pay for street improvements. As the dredger



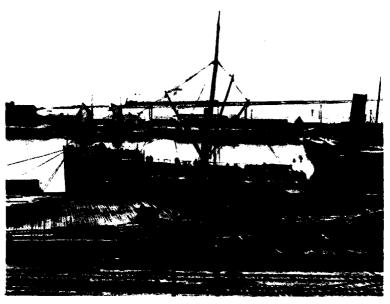
In 1903, when the Federal breakwater was under construction, the Southern Pacific Railroad controlled all the harbor frontage land in San Pedro except that beyond Timms Point and contiguous to the 42-acre Government Reservation. These lumber schooners are tied up near Fifth Street and the old E. K. Wood lumberyards.

Title Insurance and Trust Company



Inner harbor at San Pedro looking toward Wilmington in 1903.

U.S. Army Corps of Engineers, Los Angeles District



Near First Street, San Pedro, looking out at trestle built for work on Terminal Island fill, 1903.

City of Los Angeles Harbor Department



San Pedro Lumber Company Docks, circa 1903.

U.S. Army Corps of Engineers, Los Angeles District

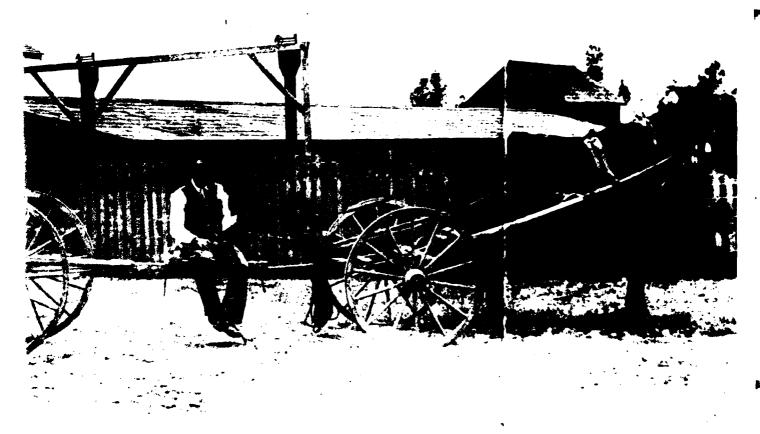
deepened Wilmington Basin at the south end of present-day Avalon Boulevard (where the old Catalina Terminal stands) and excavated the channels leading out towards Wilmington from the West Turning Basin, fill material was deposited on Wilmington streets. (No. 18, S. S. Catalina.) The channels were dredged to a depth of 30 feet, and the streets were raised as much as 8 feet. Drainage and sewage improvements made Wilmington a modern community. Meanwhile, Los Angeles allocated municipal funds for slip 1 and wharves and docks on what had formerly been Mormon Island.

In August of 1914, two ships of the American-Hawaiian Steamship Company docked at Pier A, marking the opening of Wilmington as a seaport after a lapse of a quarter-century. The symbolic significance of the event became apparent when American-Hawaiian moved its office and base of operations out of the beautiful natural bay of San Diego to make "the mud-hole" at Wilmington its permanent west coast home. San Diegans understandably expressed disbelief (ref. 19). (No. 21, Berth 158, Pier A.)



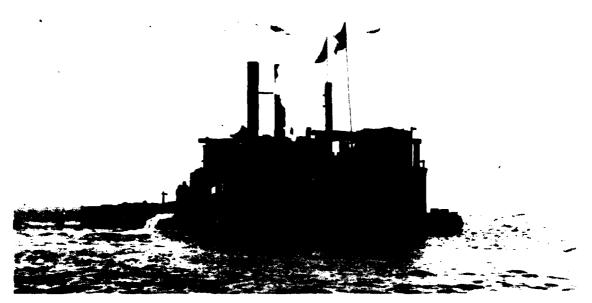
P 21

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SAN PEDRO LUMBER COMPANY

Edward Houck Collection



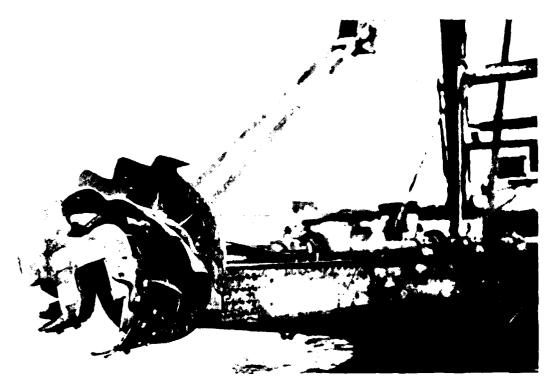
Ocean bar dredge Salt Lake City at work.

U.S. Army Corps of Engineers, Los Angeles District



Filling in behind Southern Pacific's bulkhead off Timms Point, 1903.

U.S. Army Corps of Engineers, Los Angeles District



Hughes cutter on the dredge San Pedro.

U.S. Army Corps of Engineers, Los Angeles District



The dredge San Pedro forced a large number of cobblestones through the pipe along with the silt and water to create land.

U.S. Army Corps of Engineers. Los Angeles District



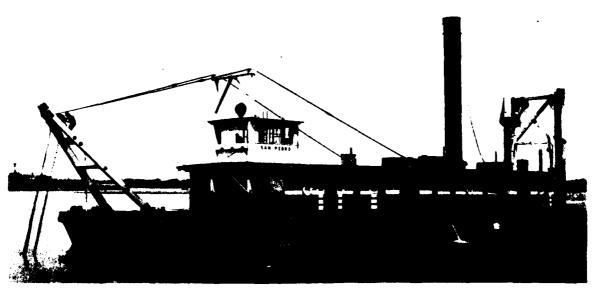
Panorama from Deadman's Island showing dipper dredge at work in channel about 250 feet northward from island in November 1903.

U.S. Army Corps of Engineers, Los Angeles District



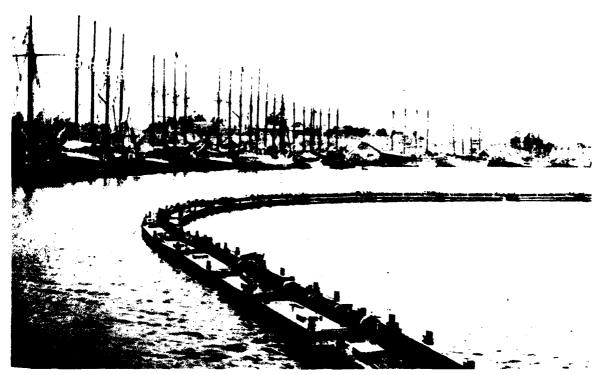
Detail of bulkhead built in the West Basin to impound the material later brought in by a suction dredge.

U.S. Army Corps of Engineers, Los Angeles District



The U.S. dredge San Pedro at work in Los Angeles Harbor.

U.S. Army Corps of Engineers. Los Angeles O strict



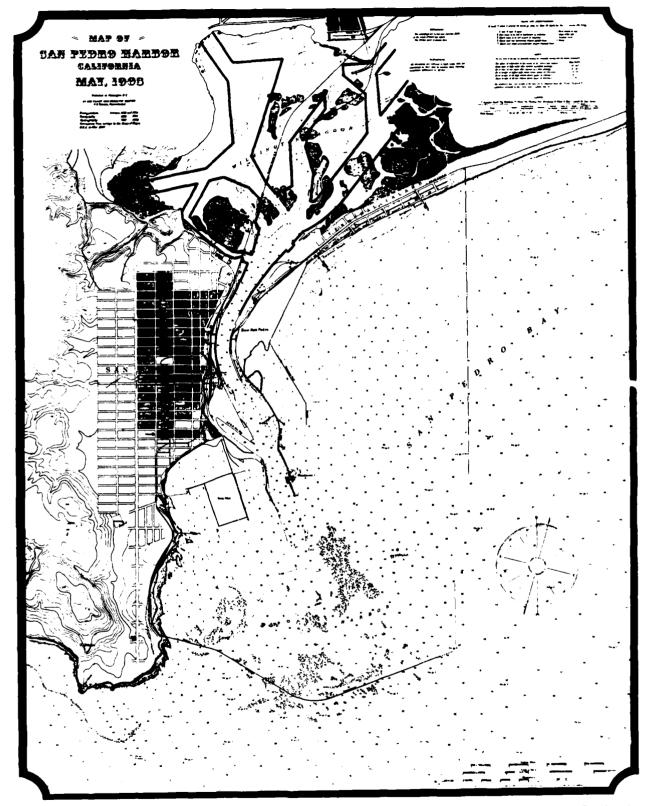
Suction dredge at work in the Inner Harbor, San Pedro, 1902.

U.S. Army Corps of Engineers, Los Angeles District



The steamer R. C. Rickmers, largest auxiliary ship affoat, docked at the Southern Pacific wharf in 1907.

U.S. Army Corps of Engineers, Los Angeles District



Source: Los Angeles Harbor Department

Map 9. San Pedro Harbor, California



Southern Pacific's newly dredged slip off Timms Point in May 1909.



Fish Harbor on Terminal Island was built during World War I to give a boost to the fishing industry when nationwide demand ran high. Dredge material compacted behind a seawall filled in 30 acres of the sea to provide land for the wharves and canneries seen here in 1919.

U.S. Army Corps of Engineers, Los Angeles District



P. 29



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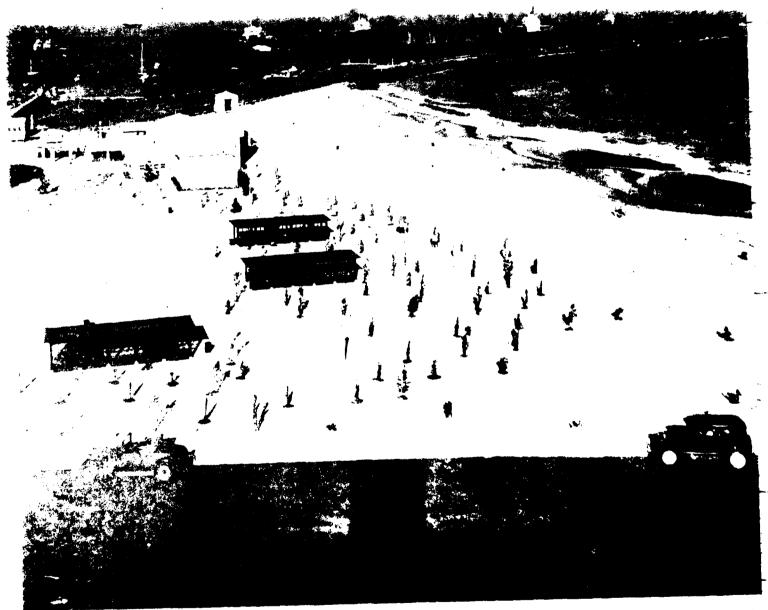
Avaion Boulevard, Wilmington, in the early 1930's.

Edward Houck Collection





P.31



Bathhouse on ocean side San Pedro Breakwater in

U.S. Army



Bathhouse on ocean side, boathouse on Cabrillo Beach at San Pedro Breakwater in the 1930's.

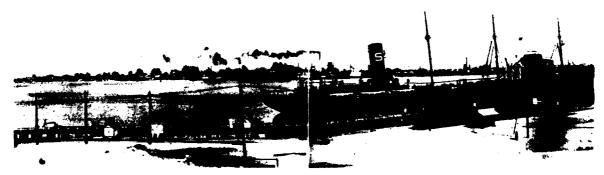
World War I and the closure of the new Panama Canal by slides slowed harbor growth temporarily. Only a part of the new municipal harbor facilities were used commercially; the rest were turned over to the U.S. Navy for wartime use as a training facility, for a submarine camp, and for marine repair. Yet in some areas development continued. In 1912 only two fish canneries operated in East San Pedro (No. 17, Terminal Island): the White Star and the Southern California Fish Company. Van Camp and six other firms located around Fish Harbor beginning in 1914 as demand for processed fish grew. Petroleum facilities and the first "tank farms" appeared, as the Harbor Board approved an application from Standard of California for tanks on Smith Island west of the Turning Basin. Union Oil built a large refinery on a site north and west of the West Basin.

During the war, stockpiles accumulated at ports all over the world; this accumulation of goods and the resurgence of business and building after the war brought prosperity and huge lumber imports into the harbor. But lumber schooners accounted for only a fraction of the tonnage by 1923. The 2 million tons of total cargo in 1913 had grown to 2,825,000 tons of lumber and 21,544,000 tons of petroleum in 1923. That year, to everyone's surprise, Los Angeles Harbor surpassed San Francisco and became the principal terminus for trade using the Panama Canal. The newly formed Greater Harbor Committee of 200 concerned citizens planned a new breakwater and a new bascule bridge to span the Cerritos Channel that connects the Long Beach and Los

Angeles Harbors. (No. 22, Badger Avenue Bascule Bridge.) Before the end of the decade a Harbor Belt Line Railway consolidated all the railroad facilities at the harbor into a single terminus.

In 1908 the main channel was only 500 feet wide and the entrance facing Deadman's Island was only 400 feet wide. Ships lying at wharves on either side of the channel created a bottleneck. During the war, the Harbor Board planned to widen the channel to a minimum of 1,200 feet. Not until 1927, however, was the removal of Deadman's Island undertaken. For 2 years boring rigs blasted holes to disintegrate the obstructing island and the debris was removed with a suction dredge. The silt and rock were deposited on the northeast side of Terminal Island, adding 62 acres at what is now called Reservation Point.

The growth of the Los Angeles Harbor has historically been guided by the constantly changing demands of world commerce and trade. The 20th century brought container terminals, bulkloaders, dredging for super tankers, and plans for liquefied natural gas. In 1963 the last ferry crossed over from Terminal Island to San Pedro as the Vincent Thomas suspension bridge opened its toll plaza. (No. 16, Vincent Thomas Bridge.) Perhaps the biggest change is one of image. Sixty years ago San Pedro was the port and Los Angeles still an inland city on the California plain, somewhat as Richard Henry Dana described it in 1835. Now, however, Los Angeles, along with Long Beach, has forged an image worldwide as the largest seaport on the western coasts of either North of South America.



Standard Oil loading wharf in 1919, Pacific Electric in foreground.

U.S. Army Corps of Engineers, Los Angeles District



Fulton Boat Yards, Berth 161, in March 1917.

City of Los Angeles Harbor Department

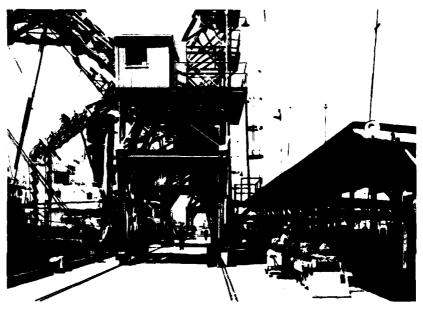


Commerce in the 1940's: lumber, cotton, oil, and bananas.

City of Los Angeles Harbor Department









Los Angeles Harbor pleasure boat facilities at the East Basin and along the Cerritos Channel to Badger Avenue Bascule Bridge in the 1950's.



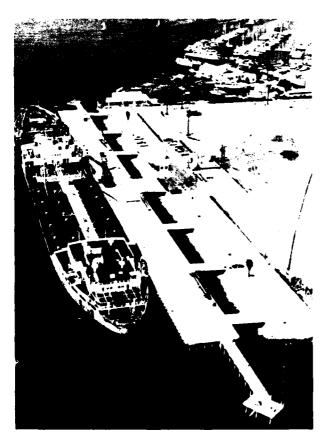
Cars leaving the Terminal Island Toll Plaza of the Vincent Thomas Bridge. The bridge was opened in 1963 to replace a wholly inadequate ferryboat run across the Main Channel.

City of Los Angeles Harbor Department



Main Channel in the late 1960's; the Ports O'Call Restaurant and shopping complex, which opened in 1961, is on the west bank.

City of Los Angeles Harbor Department



Supertanker terminal at Los Angeles Harbor handles ships carrying 500,000 to 1 million barrels of oil. Push button operated, the facility will unload a ship in a day and a half. The Sansinena, which blew up in the Los Angeles Harbor in December 1976, is shown in this photo at dockside in 1971.

U.S. Army Corps of Engineers, Los Angeles District



The East-West Container Terminal at the Los Angeles Harbor is headquarters in southern California for the containerized cargo operations of four of Japan's largest steamship companies. The 35-acre complex features a 40-ton crane capable of handling two 20-foot unattached containers simultaneously, which it can load on and off a ship every 3 minutes or at a rate of 80 per hour.

LONG BEACH HARBOR

In 1783, Pedro Fages, Governor of California, issued the first grants of land to private individuals. Manuel Nieto, a former soldier who had requested land upon which to graze cattle, received a grant that was bounded by the ocean on the south. El Camino Real "highway" on the north, the Santa Ana River on the east, and the San Gabriel River on the west. Because, at that time, the San Gabriel River flowed into San Pedro Bay, this grant included all of the land upon which Long Beach currently stands.

In 1833, 29 years after Nieto's death, his lands were divided among his heirs. In this way, the Ranchos Santa Gertrudis, Los Bolsas, Los Cerritos, Los Alamitos, and Los Coyotes were created. Most of modern Long Beach stands on land that was included in the Los Alamitos and Los Cerritos Ranchos. Alamitos Avenue in downtown Long Beach follows the old boundary line between the two estates.

The Rancho Los Alamitos was acquired in 1842 by Abel Stearns, a New Englander who had migrated to California in 1829 and who had subsequently been successful in the hide and tallow trade. The purchase price of the Rancho was \$5,954. In 1843, another transplanted New Englander named John Temple acquired the neighboring Rancho Los Cerritos. Both men became Mexican citizens as a condition of their land title, and for the following two decades their hide and tallow businesses flourished. The early 1860's, however, were characterized by a succession of floods and periods of drought that eventually ruined the ranchos. Stearns mortgaged his Rancho to San Francisco businessman Michael Reese in 1864. and when he defaulted on his payments, the property passed to Reese. The Rancho Los Cerritos was likewise sold in 1866 by Temple to Flint, Bixby and Company, also of San Francisco.

The management of the Rancho Los Cerritos was turned over by Flint, Bixby and Company to Jotham Bixby who formed a subsidiary named J. Bixby & Co. for that purpose. The primary activity of J. Bixby & Co. in the Long Beach area was the raising of sheep.

Meanwhile, Reese, and his estate retained possession of the old Rancho Los Alamitos until 1881 when it was sold for \$125,000 to a group of investors consisting of John Bixby (Jotham's cousin), J. Bixby & Co., and a Los Angeles banker named I. W. Hellman. John Bixby managed this parcel of land in much the same way that his cousin Jotham managed the neighboring Los Cerritos ranch.

In 1880 the first plan for the establishment of a community in the Long Beach area was announced. It called for the subdivision of 10,000 acres of land on the Cerritos Ranch to form an "American Colony Tract". In 1882 the California Immigrant Union (CIU), which had been the main financial backer of the American Colony, backed out and the program was reorganized under the leadership of William Willmore, a former employee of the CIU. During the next 2 years, land was surveyed and a map of Willmore City was prepared. The modest success the city enjoyed in attracting residents during its first year was ruined by torrential rains in the fall and winter of 1883. Consequently, Willmore was unable to make payment to J. Bixby & Co. from whom he had arranged to buy the property and the colony failed.

Shortly thereafter, however, land values began to rise, and the rights to the town were purchased by a new syndicate called the Long Beach Land and Water Company. In 1884 the name of the town was changed from Willmore City to Long Beach. In 1887 the town was sold to a San Francisco syndicate, the Long Beach Development Company, that was closely associated with the Southern Pacific Railroad. An important condition of the sale was that the company buy 800 acres of marshland west of town. This land subsequently became the Long Beach Inner Harbor area.

Urban development during these years was not confined solely to the Cerritos Ranch area. As Long Beach was beginning to develop,

John Bixby in 1886 laid plans for another community that he called Alamitos Beach. This new town adjoined Long Beach at its east boundary, Alamitos Avenue. The two towns coexisted until, by a series of annexations beginning in 1905, Long Beach absorbed Alamitos Beach.

In 1890 Long Beach had a population of 564; by 1907 that number exceeded 20,000. Much of this growth has been attributed to the city's reputation as a year-round pleasure resort and to the absence of saloons. However. all of southern California's population grew rapidly in those years, and railroad transportation played the vital role in bringing people west. In 1887, when the Long Beach Development Company bought the town, the company laid out plans to bring people to Long Beach and to make the area an important resort community. A large pier was constructed at Magnolia Street in 1888, the Pine Avenue Municipal Pier was constructed in 1893, and the Pacific Electric Railroad came to Long Beach in 1902. The heyday of the Long Beach era followed. The pike, the beach, and the pleasure piers were crowded on Sundays. (No. 26, Looff Carousel.) R. L. Bisby, Secretary of the Chamber of Commerce, managed to have articles about the vacation mecca published all over the country. People came to bathe in the surf, rent a cottage, or stay in the elegant Virginia Hotel. The climate was invigorating, and many visitors stayed permanently, adding to the city's commerce and to the logic of harbor expansion.

The 800 acres of "mudflats" destined to become the Long Beach Inner Harbor were purchased by the Los Angeles Dock and Terminal Company in 1905. About a year after this purchase, the Dock and Terminal Company awarded a contract for the dredging of the San Gabriel River, and dredging began in December 1906. Plans at the time called for the creation of a 1,400-foot turning basin and the creation of three channels. During the following year, the Craig Shipbuilding Company was established on Channel Three. Four years later in 1911, construction of a 500foot-long municipal wharf was completed on the same channel. (No. 25, Craig Shipbuilding and No. 23, Edison Power Plant.)

Further development of the Los Angeles and Long Beach Harbors depended upon the successful completion of the dredging of a channel north of Rattlesnake (Terminal) Island through the Cerritos Slough area to connect the twin inner harbors of San Pedro and Long Beach and the diversion of the Los Angeles River to the east of Long Beach Harbor. The latter task was necessary because severe silting of the harbor occurred when the river flooded periodically.

The constant dredging of the harbor necessitated by the silting proved too great a burden for the Dock and Terminal Company. After the floods in 1914 and 1916, the company declared bankruptcy and the City of Long Beach acquired control of its harbor. In early 1917, the newly created Los Angeles County Flood Control District proposed that a diversion channel be built through Long Beach to the ocean. The proposal was approved in a bond issue election and the Los Angeles River was diverted to its present course. With the completion of the flood control channel in 1923, the problem of extensive silting was permanently controlled.

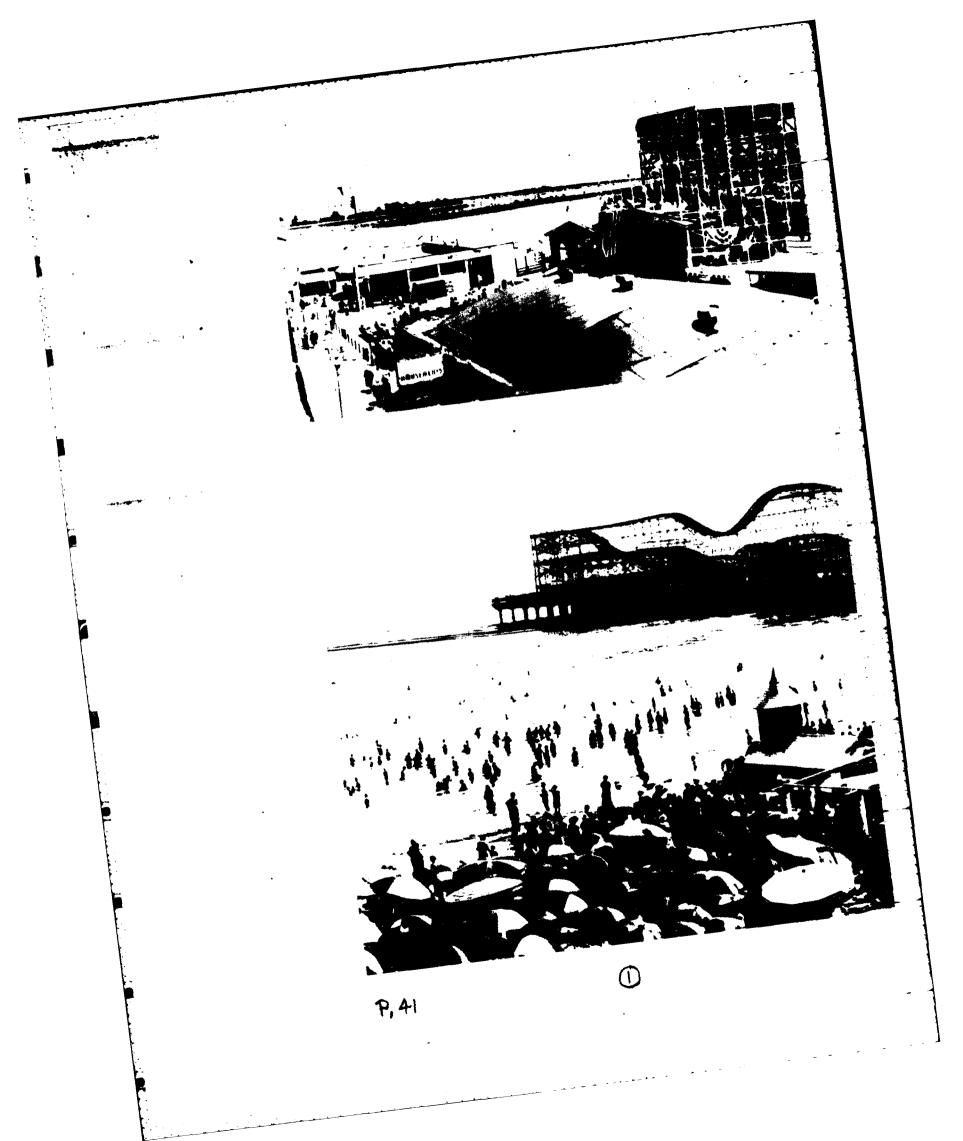
During 1918, the City of Long Beach and the Army Corps of Engineers combined their efforts to dredge a 200-foot-wide channel connecting the twin inner harbors of Los Angeles and Long Beach. Thus Cerritos Slough was transformed into Cerritos Channel, and regular navigation between the two harbors became possible. The channel was subsequently widened to 300 feet.

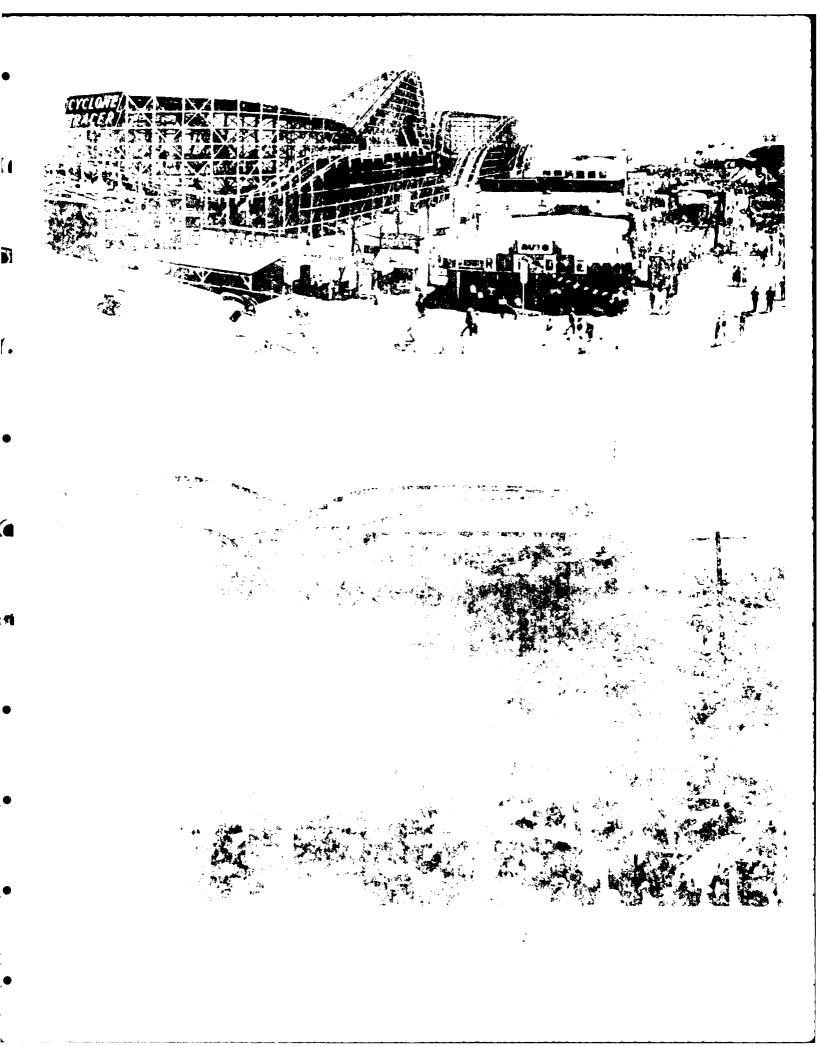
In 1924 Long Beach began to develop the outer harbor. Financed by a bond issue passed in that year, a 7,100-foot-long breakwater and two moles, one extending to the east and another extending to the west, were completed by 1926 (map 10). Further improvements financed by a 1928 bond issue included the construction of a new municipal wharf in the inner harbor and continued work on the outer harbor. Leigh Landing was completed in 1932. By 1939 revenues had financed continued development of the outer harbor facilities, including the filling in of the beginnings of what are now Piers A and B. Piers C, D, and E were built in the years immediately after World War II. It is on Pier E that Howard Hughes' "Spruce Goose" is located. Oil removal from the subsoil, however, caused Long Beach Harbor land to sink. By the early 1950's, subsidence in some areas was as great as 33 feet. Water pumped into the earth to replace the oil solved the problem. (No. 24, Hughes Flying Boat and Drydock Hangar.)

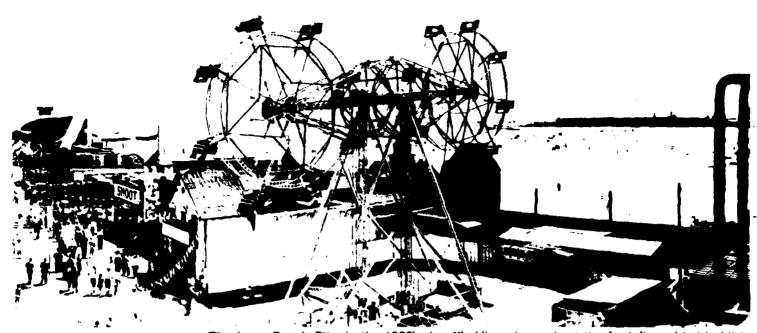
During the early 1950's, Pier A was extended to the configuration shown on map 10. This pier was subsequently expanded with the construction of Piers F and G. Most of this construction was completed by the mid-1960's. The harbor facilities were again expanded, to their present size, later in the decade.

Meanwhile, Long Beach was developing in other areas. Oil was discovered on Signal Hill in 1921 and subsequent oil revenues financed continued harbor expansion.





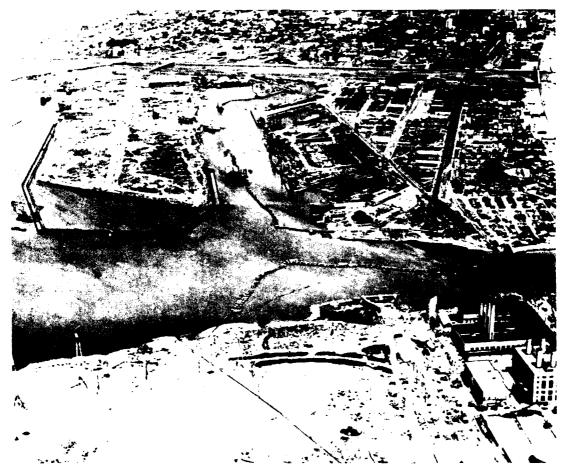




The Long Beach Pike in the 1920's. Looff's Hippodrome is at the far left, and behind it is Rainbow Pier and the old Municipal Building. Courtesy of Ben A. O'doeisio

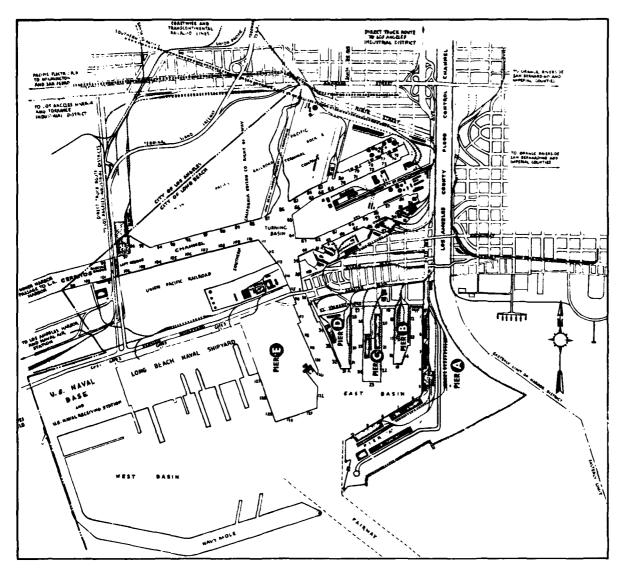


Sunday on the Long Beach Pike, circa 1910. Looff's Hippodrome rises above the other buildings right of center.

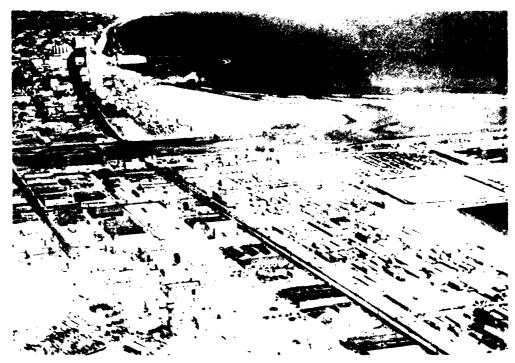


Panorama of inner Long Beach bulkhead, dredge, and fill operations in 1925. Edison Plant is in foreground.

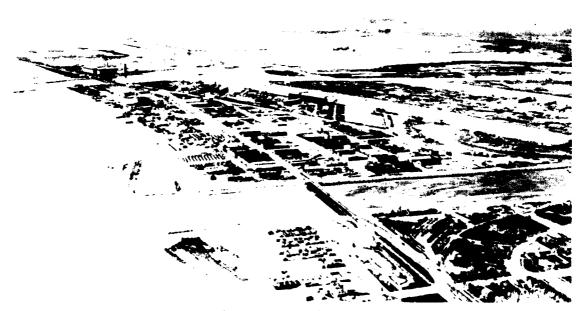
U.S. Army Corps of Engineers. Los Angeles District



Map 10. Long Beach moles.



Long Beach looking east from Terminal Island. Sand is now out beyond where the Rainbow Pier appears in the background. (June 1938)



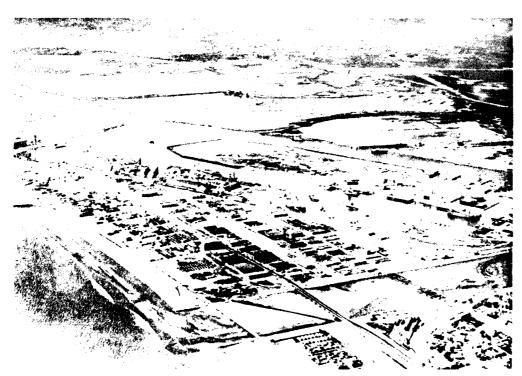
Looking west toward Wilmington and Terminal Island from Long Beach. (1922)

17.S. Army Corps of Engineers. Los Angeles District



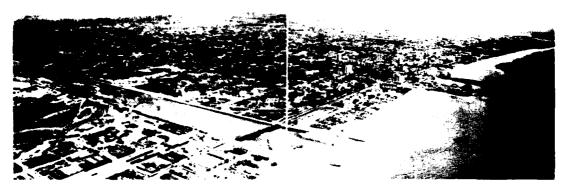
Los Angeles River outlet at Long Beach. (1937)

U.S. Army Corps of Engineers, Los Angeles District

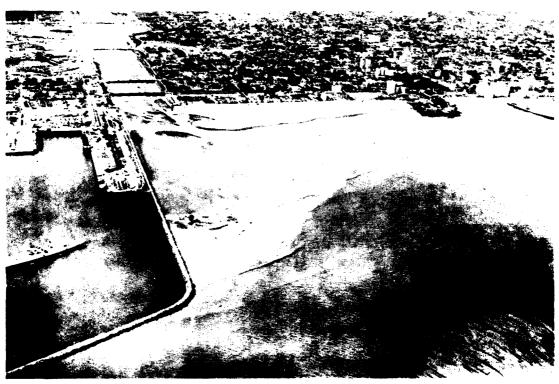


Looking west over Long Beach Harbor toward Wilmington and Terminal Island Salt flats lie in the upper left part of the picture. (1926)

U.S. Army Corps of Engineers. Los Angeles District

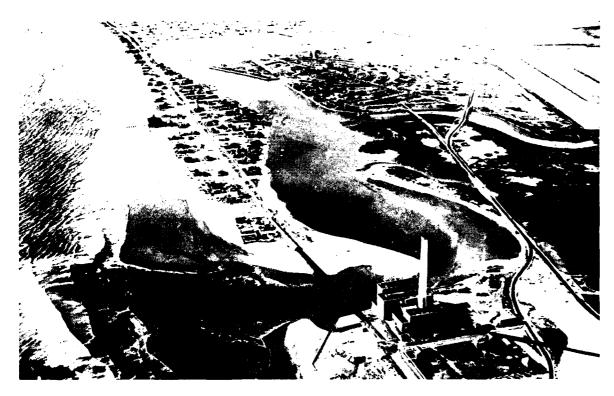


Long Beach in 1920 with well developed amusement zone, Los Angeles River outlet, and Signal Hill oil derricks in the background.



West Long Beach looking northward from the sea. Naval ship on left. (1938)

U.S. Army Corps of Engineers. Los Angeles District



Alamitos Bay in 1928. Pacific Electric Railway trestle lies across mouth of the bay.

U.S. Army Corps of Engineers, Los Angeles District

Notes and Sources

Referenced sources for San Pedro Bay and Los Angeles portions of the report:

- 1. Henry Raup Wagner, Spanish Voyages to the Northwest Coast of America in the Sixteenth Century (Amsterdam: 1966), pp. 85-86.
- 2. Ibid., p. 438. Other early maps and descriptions of San Pedro Bay are included in the works of Davidson, Pantoja, Shaler, Fermin, and Ludwig. See bibliography.
- 3. James Miller Guinn, Historical and Biographical Record of Southern California (Chicago, 1902), p. 451.
- 4. William Shaler, Journal of a Voyage between China and the Northwestern Coast of America made in 1804 by William Shaler (Claremont, Ca., 1935).
- 5. J. J. Warner, B. Hays, and J. P. Widney, An Historical Sketch of Los Angeles County, California from Spanish Occupancy to July 4, 1876 (Los Angeles, 1936), p. 15. The abundance of rattlesnakes on the island was probably due to their having been washed down rivers and trapped on the island.
- 6. Guinn, Historical, p. 64.
- 7. Richard Henry Dana, Two Years Before the Mast (Los Angeles, 1964), pp. 99-100; see also Alfred Robinson's account of the carnival-like atmosphere at San Pedro in 1829 as the hide drogher-department store anchored offshore in Life in California (San Francisco, 1897), pp. 50-51.
- 8. The grant to the Sepulveda family made by the Mexican Government in 1894 read:
 - "4th. They shall leave free on the beach at San Pedro five hundred varas square, to the four cardinal points, upon which houses may be built by persons who may obtain permission to do so; they shall not be permitted to prevent the use of water and pasture by

persons engaged in traffic with oxen or horses to the Port of San Pedro." Quoted in Clarence Matson, Building a World Gateway (Los Angeles, 1945), p. 75.

- 9. James Miller Guinn, A History of California and an Extended History of Los Angeles and Environs, Vol. I (Los Angeles, 1915), p. 250.
- 10. San Pedro Harbor:, Out West, XXVII, 4 (October, 1907), p. 303.
- 11. U.S. Army Corps of Engineers. Report (Washington, 1880), p. IV.
- 12. Ella A. Ludwig, History of the Harbor District of Los Angeles (Los Angeles, 1927), p. 262.
- 13. Glenn S. Dumke, The Boom of the Eighties (San Marino, 1944), p. 70.
- 14. A. M. Hager and E. G. Hager, "Terminal Island's Glamorous Past", Los Angeles Corral, No. 111, 1973, passim.
- 15. Fries, "San Pedro Harbor", p. 318.
- 16. Matson, p. 52.
- 17. Anthony Turhollow, A History of the Los Angeles District U.S. Army Corps of Engineers 1898-1965 (Los Angeles, 1975), pp. 42-43.
- 18. San Pedro News Pilot.
- 19. Matson, pp. 73-90.

Sources for the Long Beach section of the cultural history included:

Charles Barton, "The Development of a Community", Pacific Monthly, Portland, Vol XVII pp. 748-756; Walter Case, History of Long Beach and Vicinity, Vol I, I; Malcolm Epley, "Black Gold Harbor", California Historian, Vol. XIII, pp. 113-116; John S. McGroarty, History of Los Angeles County, Chapter XXXV; R. L. Bisby, "Long Beach, the Vacationists Mecca", Grizzly Bear XIII. 2 (June, 1913) passim.

CULTURAL RESOURCES IN THE HARBOR AREA

ARCHEOLOGICAL RESOURCES

The 18 formally reported archeological sites in the study area are listed below by the USGS 7.5-minute map on which they are

located. None of these sites are included on the National Register of Historic Places, although any or all of them may qualify for such status.

Reported sites References (UCLA site files)

San Pedro quadrangle

CA-LAn-144 CA-LAn-145 CA-LAn-146	Bucknam 1974, UCLA Bucknam 1974, UCLA Bucknam 1974, UCLA	CA-LAn-147 CA-LAn-282	Bucknam 1974, UCLA Bucknam 1974, UCLA, Butler 1973, Desautels 1968
ON-EAH-140	_	ce quadrangle	Butter 1973, Desauters 1900
CA-LAn-149 CA-LAn-150	Bucknam 1974, UCLA Bucknam 1974, UCLA	CA-LAn-285	Bucknam 1974, UCLA, Racer 1939
	Long Bea	ach quadrangle	
CA-LAn-231 CA-LAn-236 CA-LAn-693	Bucknam 1974, UCLA Bucknam 1974, UCLA UCLA	CA-LAn-698 CA-LAn-700 CA-LAn-701	UCLA UCLA UCLA
	Los Alam	itos quadrangle	
CA-LAn-102	Bucknam 1974, UCLA	CA-LAn-272	Bucknam 1974, UCLA,

CA-LAn-102 CA-LAn-232	Bucknam 1974, UCLA Bucknam 1974, UCLA,	CA-LAn-272	Bucknam 1974, UCLA, Brooks, Conrey and Dixon
CA A= 000	Dixon 1972		1965
CA-LAn-233	Bucknam 1974, UCLA.		

Seal Beach quadrangle

No sites are formally reported for the project area although several known sites are just northeast of the study area.

The listed archeological sites probably do not represent all of the archeological resources within the study area because much of this area was developed before it could be systematically surveyed by trained archeologists. There is a great likelihood that

Dixon 1972

cultural resources have been destroyed, obscured, or buried by recent development. Moreover, it is possible that cultural resources have been deeply buried by natural processes prior to Anglo-American occupation.

UNDERWATER RESOURCES

The two harbors have been subjected to much impact through Anglo-American harbor and related-facilities construction. The Port of Long Beach General Plan 1975, a recent study of the harbor area prepared by Soils International, the Allan Hancock Foundation at the University of Southern California, and Socio-Economic Systems, Inc., has documented some of these changes. For example, Deadman's Island, which contained Native American cultural material, has been destroyed and removed altogether, and Rattlesnake Island has been drastically modified into the present Terminal Island.

Dredging, piling construction, and landfill operations have changed the original bay and estuarine marsh landscape into the metropolitan "cityscape" it is today. All of these activities may have destroyed prehistoric sites or may have redeposited important cultural remains in the study area. For example, a human skull was discovered deeply buried at the present mouth of the San Gabriel River and, although it was found in a disturbed condition. it has provided valuable scientific information on prehistoric human osteology. Isolated finds of underwater artifacts have also been discovered near the study area. In addition, a site recently found off Palos Verdes may have data representative of foreign transoceanic voyages to our coast prior to 1542 A.D. (the voyage of Juan Cabrillo).

During the Late Prehistoric Period, the Gabrielino Indians conducted commerce between Catalina Island and the mainland on seaworthy watercraft. Evidence of this commerce may lie under water in the study area. Thus, although no prehistoric sites are currently known for the underwater area of concern to this report, there is a considerable potential for their existence.

There are probably many shipwrecks in the harbors that, depending on the situation, may be valuable cultural resources. A popular guide to local water sports, the Chart Guide for Southern California Boating, Diving, and Fishing (1975), by Edmond Winlund, lists a number of submerged and partially exposed shipwrecks in the harbors. The U.S. Department of Commerce and the National Oceanic and Atmospheric Administration have conducted a survey and produced the Los Angeles and Long Beach Harbors marine chart (chart No. 18751, 1976), which lists about 21 submerged and partially exposed shipwrecks.

A recent academic study of California shipwrecks conducted by Gibson and Pierson (1977) suggests that the vast majority of these wrecks have not been properly identified or located; consequently, a determination of whether they qualify as significant cultural resources cannot be made. Moreover, a student of California shipwrecks estimates that there are "upwards of 100 wrecks in the harbors which vary in age from significant old wrecks to perhaps culturally insignificant modern wrecks" (Pierson 1977, personal communication).

The harbors may contain wrecks of considerable cultural significance. For instance, a 1925 report states:

The framework and planking of a craft, which had withstood the stress of years and which is believed to have been used centuries ago by Chinese or Spanish explorers or pirates, have been uncovered many feet beneath the earth's surface at Los Angeles harbour in excavations for an oil storage tank (Mariner's Mirror, 1925).

The presence of this wreck has not been verified.

There is very little accurate information about the wrecks in the harbors, but the following vessel descriptions are representative samples of available information on these wrecks.

1. The Danube. This vessel, lost at San Pedro on December 24, 1838, could be the locally famous ship built at San Gabriel Mission. An anchor from a vessel of this age is now on display at San Gabriel Mission; the anchor may have belonged to the *Danube*. The wreck is now probably buried.

- 2. Ada Hancock. In 1859, Phineas Banning, an early business magnate at the harbors, built a small vessel for "lighterage service" (the use of a smaller ship to unload larger vessels offshore in suitably deep water). The 83-ton, steam-powered ship was sunk in the harbor on April 27, 1863 and about 26 lives were lost.
- 3. Silver Strand. The former San Diego-Coronado ferry was built at Alameda, California, in 1927. The ferry once served on Puget Sound as the Elwha and on San Francisco Bay as the Golden Shore. The ferry went down in a storm in 1970 and its position in the harbor is well known. The wreck has possible cultural resource value because of its historically valuable fittings of museum quality.

These examples indicate that there are considerable cultural resources within the underwater areas of the study site.

CULTURAL RESOURCE SITES IN THE HARBOR AREA

Cultural resource sites in the harbor area are shown on map 11 and are listed by number in this section of the report.

I. Point Fermin Lighthouse

The lighthouse is in Point Fermin Park at the extreme south end of Gaffey Street, San Pedro. It is listed in the National Register of Historic Places.

As early as 1858, \$4,000 was appropriated to build a government lighthouse at the south tip of San Pedro Harbor. Not until 1874, however, did construction actually begin when lumber and bricks were brought around Cape Horn by sailing ship. For its time, the lighthouse was a palatial structure, replete with gimcrackery and surmounted with a cupola fitted with a 2,100-candlepower light. Miss Mary L. Smith, the first lighthouse keeper, lived alone with her sister, but they gave up the lonely occupation because there were no other settlers nearer than Wilmington. In the 1880's,

when Captain George Shaw was keeper, the lighthouse was the scene of many parties.

Oil lamps were used to signal approaching ships until 1925 when they were replaced with a new electric light that projected a 6,000candlepower beam 18 miles out to sea. During World War II, the Coast Guard, for security purposes, turned off the light and painted the gleaming white building "wartime green." After the war the light remained off, and radar and direction finders took over sentry and signaling duties. The structure fell into disuse, eventually becoming a fixture of a 28-acre park, an expanse of tree-shaded lawns, sheltered pergolas, a promenade along the edge of the palisade, and a picnic ground. The park, which is called Point Fermin, was named in 1793 by English Captain George Vancouver in honor of Fermin Francisco de Lasuen, "padre presidente" of the Franciscan missions. This vantage point atop the rugged bluffs affords a magnificent view of the ocean. The original cupola has been reconstructed, and a search is being made for the original lantern.

Copy of the application for inclusion in the National Register is in the appendix.

2. San Pedro Breakwater and Angels Gate Lighthouse

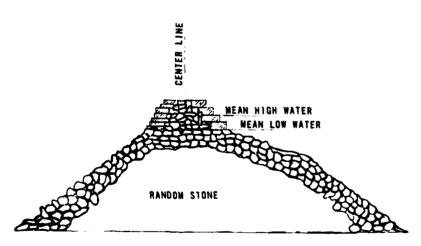
This Government-built breakwater starts at the tip of the San Pedro headland at Cabrillo Beach, curves to the south, and goes eastward for 11,080 feet. At its end stands Angels Gate Lighthouse.

San Pedro Bay was not in itself a protected natural harbor. In 1835 Richard Henry Dana aptly described it as an open roadstead and complained that his ship was "exposed to every wind that could blow, except for the northwest" (Dana, p. 98). To make matters worse, the waters were shallow as a result of silt deposits from the Los Angeles and San Gabriel Rivers, and a sandbar blocked the entrance at Deadman's Island allowing only a 2-foot clearance at low tide. Even with these drawbacks, San Pedro in 1890 was still the best harbor between San Francisco and San Diego. Also, San Pedro lay fairly close to Los Angeles



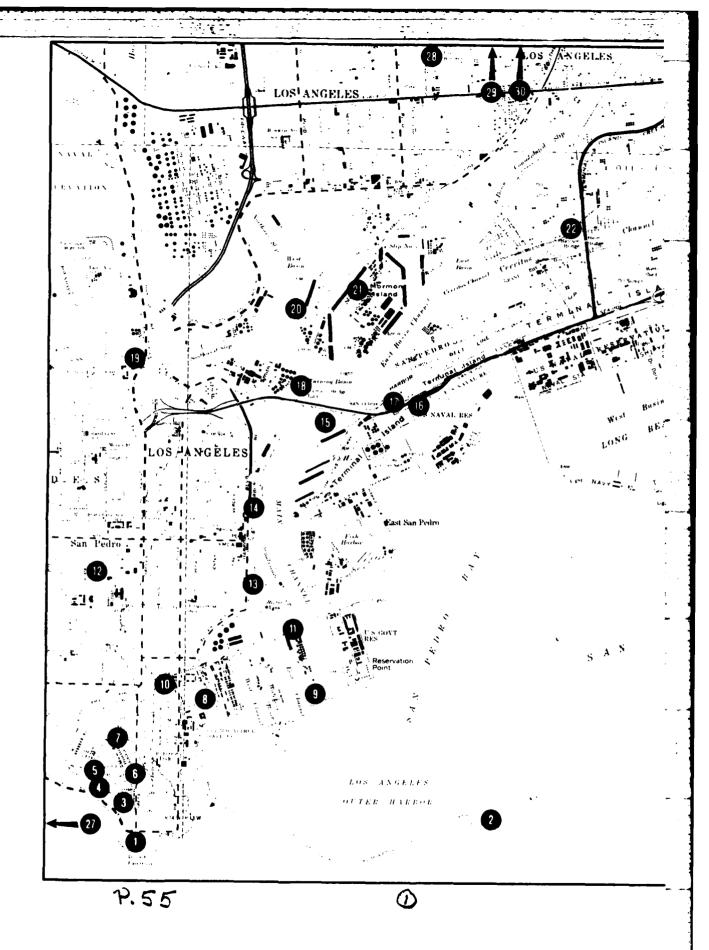
Point Fermin and the government lighthouse in 1898.

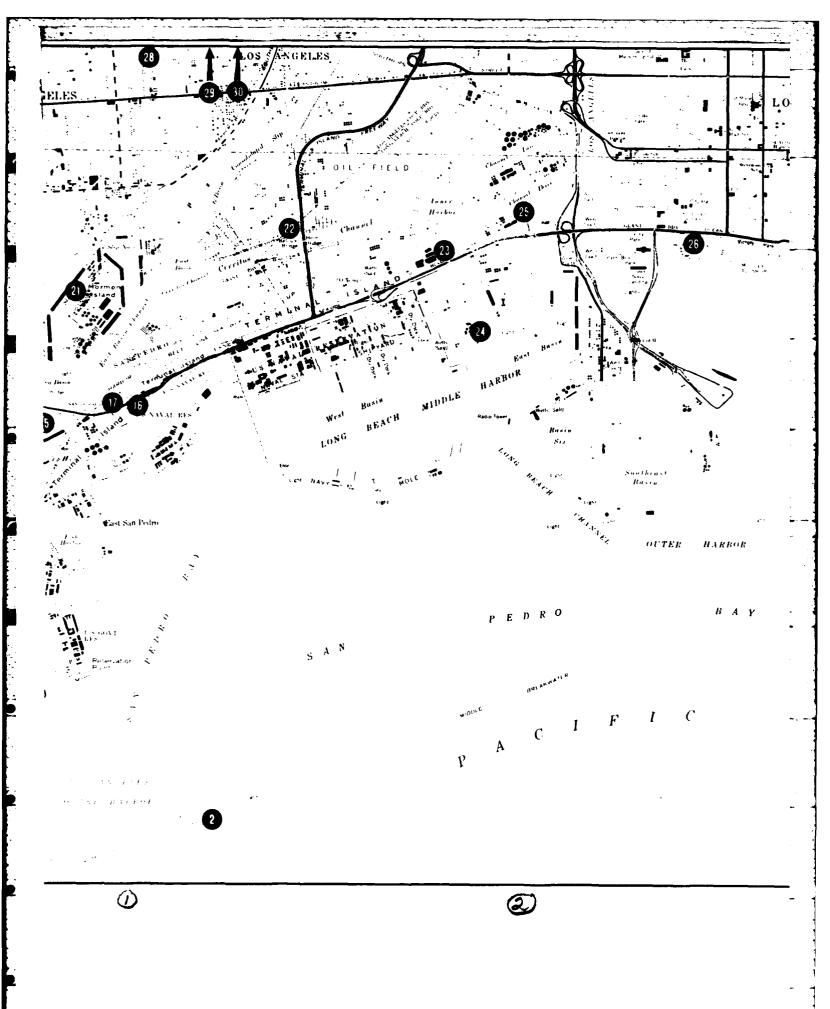
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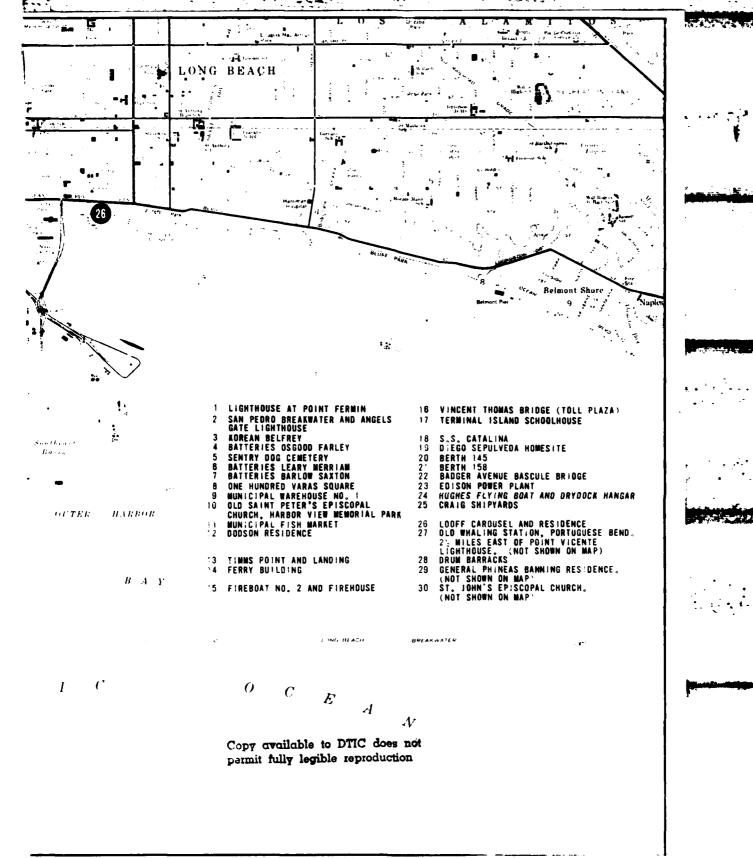


CROSS SECTION

PROFILE OF THE OUTER BREAKWATER







whose hills and plains had generated exports dating back to the hide and tallow trade of the 1820's. Thus, in the 1890's, when a decision had to be made as to where millions would be spent to develop a deepwater harbor somewhere on the south coast of California, San Pedro would seem to be the logical choice. But the 1890's fell into the railroad era of United States history when most economic and many political decisions were made by a handful of men who owned and controlled the railroads.

The Southern Pacific monopolized transportation in California, dictated rates to farmers, decided whether a community would dry up or flower, owned the ferries and streetcars of San Francisco, and successfully influenced lawmakers and judges throughout the State. In 1872 Southern Pacific had come south from San Francisco and was laying track toward a terminus at Yuma, Arizona. To persuade its owners, "The Big Four," to build over the San Fernando Range and into Los Angeles before starting east, Phineas Banning, promoter and part owner in the only rail line in southern California (the Los Angeles & San Pedro Railroad), Governor Downey, and Los Angeles civic leaders put together a package of inducements. Southern Pacific would have to build a 7,000-foot-long tunnel to bring the road through the mountains, so the inducements had to be substantial. They eventually included all the stock in the Los Angeles & San Pedro Railroad, a tract in east Los Angeles for railroad vards, and \$377,000 in bonds voted by the people of Los Angeles. Southern Pacific obtained a monopoly on traffic at the harbor and on all transport in and out of Los Angeles. Within a decade it charged more for the Los Angeles-San Pedro haul than a shipper would have to pay to move the same cargo from San Pedro to Hong Kong (ref. 1).

A crack in Southern Pacific's empire came in 1875 when John P. Jones, a young mining millionaire, ran the Los Angeles & Independence line out to the coast at Santa Monica Bay. He then registered Santa Monica as a township and built a wharf out into the bay to service shipping. By 1879 Southern Pacific owned that railroad line and the pilings of the wharf had been cut off at the waterline during low tide. In 1889 the Redondo Railway

Company constructed a wharf and ran a line into Los Angeles. Serious competition began when the Santa Fe Railway came into Los Angeles and when the Los Angeles Terminal Railway built a line to San Pedro in 1891. The latter paralleled the Southern Pacific line about 5 miles to the east, crossed over to Terminal Island, and went on to the west shore of the island. The Terminal Company constructed wharves in what overnight became East San Pedro and began to unload ships.

The boom of the 1880's brought thousands of people to southern California and made civic leaders realize that Los Angeles' commerce would grow in proportion. They had to break away from strictly coastwise trade and provide facilities for deep sea vessels from all over the world. As a local journalist wrote, Los Angeles wanted to be able to take cotton from Texas, hams from Kansas, and canned fruit from California to the Orient.

In 1886 the Angelenos convinced Congress to fund a preliminary survey for harbor improvements, and in 1888 the survey team headed by Colonel Mendell enthusiastically submitted plans to Congress for a double-armed breakwater costing \$4,045,700. Southern Pacific Railway, then under the presidency of Senator Leland Stanford, seemed ecstatic. Stanford proposed that his company build several large ships for the Orient trade and make San Pedro their terminus. His rail tracks were by then out to about Timms Point (near 14th Street) and the railway was busy constructing a new wharf there.

The recently formed Los Angeles Chamber of Commerce began a campaign to acquaint members of Congress with the natural attributes of San Pedro and invited all who could to come to California and see the bay. Senator William P. Frye, Chairman of the Senate Commerce Committee that approved all bills on harbor appropriations, came out to the West Coast. Senator Leland Stanford, representatives of the Chamber of Commerce, and other civic leaders took him to San Pedro in great style. Surveying the mudflats and shallow bay. Frye pronounced that a harbor in that location was out of the question. He told the Angelenos:

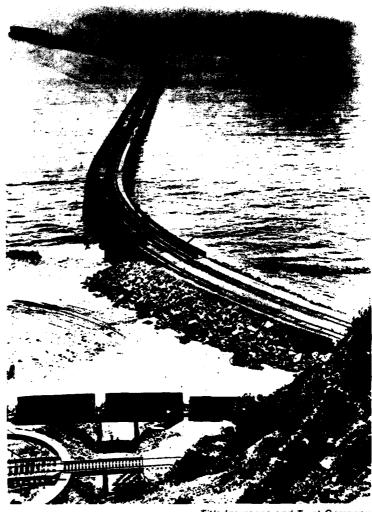
The Lord has not given you much to start with, that is certain. It will cost four or five million to build you say. Well, is your whole country worth that much? (ref. 2)

The next day Frye visited Santa Monica as a guest of Senator John P. Jones and found that bay quite appropriate for a harbor. In 1890 Congress sent out Colonel Mendell and two other engineers to the south coast to "determine the best location for a deepwater harbor, to prepare a project and to estimate its costs" (ref. 3). Again, the recommendation was for a two-armed breakwater at San Pedro but at the slightly higher cost of \$4,137,591. When this report reached Senator Frye's Senate commerce committee there appeared to be no question about its approval until a telegram was introduced from the chief engineer of the Southern Pacific Railway. Frye read from it that a harbor at San Pedro would be worthless because the bottom of the bay was so rocky that piles could not be driven into it. It added that for this very reason the Southern Pacific wharf at Timms Point had been abandoned. The Mendell Board had found sufficient holding ground, but nonetheless the telegram succeeded in killing approval for harbor work at San Pedro in that year.

Surprisingly, Southern Pacific no longer supported a deepwater harbor at San Pedro. The reasons seem to have grown out of some kind of internal problem among the Big Four that owned the Railway: perhaps it was caused by Leland Stanford's enthusiasm over the harbor improvements (ref. 4). In any event Collis P. Huntington replaced Stanford as the company's president on April 9, 1890. Huntington immediately bought up property along the Santa Monica shoreline, ran his own rail line north along the coast for about 3 miles, and at that point began work on a huge wharf out into the sea. The wharf was nearly a mile long (4,720 feet). He bought 200 acres on the Pacific Palisades bluff and began landscaping it for a residence from which he could overlook his harbor. Huntington moved all Southern Pacific's pressure for Federal breakwater appropriations to Santa Monica Bay where he could monopolize the wharf, the rail access, and all the shore frontage.

Even as piles for the Long Wharf were being driven, a second board of engineers headed by Colonel William Craighill came out to the coast in September 1892 to determine the respective merits of the harbor sites. Like the other army engineers, they found San Pedro the best choice on all points considered and recommended a breakwater costing \$2,900,000. The decision appeared final. Yet Collis Huntington went right on building his million dollar wharf, gave it the name Port of Los Angeles on April 29, 1893, and received cargo vessels the next month. The fight over where Los Angeles would have her harbor had begun. The Free Harbor League of Angelenos, the Santa Fe Railroad, the Los Angeles Times, numerous eastern supporters, and the three teams of engineers with their reports supported the San Pedro site. Mr. Huntington and a skillful Washington lobbyist with a network of seasoned connections at the capital supported the Santa Monica location (ref. 5).

Collis Huntington managed to block any followup on the Craighill report, and a national depression beginning in 1893 made the nearly \$3 million appropriation out of line. In 1896 Senator Stephen M. White, a Los Angeles resident who was a strong ally of the Free Harbor League and whose political manager was the customs collector at San Pedro, convinced his constituents that a minor appropriation was possible. He went before the House Rivers and Harbors Committee with a request for \$400,000 to be spent on dredging the inner harbor to a depth of 25 feet. Huntington, although present at the hearing, raised no objections but later met with the committee alone. There he asked that \$2,800,000 be added to White's allocation but for a breakwater at Santa Monica. He was accommodated. Senator White and Congressman James McLachlan of Los Angeles protested strongly to the chairman who reacted angrily and sent the bill on to the Senate with no appropriation at all for San Pedro; the combined sum went to Santa Monica. This setback spurred White to his finest hour. While batches of letters and telegrams lay on his desk telling him to at least get back the double appropriation, he stood firm in his resolve to block any kind of special interest legislation whatsoever. He went before



In 1890 Collis Huntington built a huge wharf at Santa Monica, where Southern Pacific monopolized the shoreline.

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the Senate Commerce Committee with the harbor's old adversary Senator Frye at its head and brought in Colonel Craighill and other experts to testify. But in spite of this, by a vote of 9 to 6 the whole \$3 million was to be used for the breakwater at Santa Monica.

Had it not been for White's next ingenious tactic. Huntington's Port of Los Angeles would probably have received the appropriation for the breakwater and be the city's port of entry today. White requested that a third engineering board be sent to the south coast, that it choose the best harbor site, and that the entire sum be

spent there. The committee refused his request and he promptly took the matter to the floor of the Senate. There, in a 3-day brilliant debate with Senator Frye, he convinced the Senate of the committee's misjudgment. Frye, sensing the change in mood, capitulated. A new team of experts, the Walker Board, traveled to California and again chose San Pedro. As historian Curtis Grassman has written, "Collis Huntington and his Southern Pacific juggernaut were thus stopped on the very edge of victory" (ref. 6). Over 10 years had passed since the first survey team had recommended a breakwater at San Pedro to serve the impatient Angelenos.

After this disappointment Collis Huntington's efforts concentrated on delay. He still had friends in Washington, including General Russel A. Alger, the Secretary of War, the man who would issue orders to the Army Corps of Engineers to commence the job. Alger employed a host of protocol maneuvers such as refusing to advertise for bids on the excuse that he had no funds with which to place ads. Finally, Los Angeles citizens went to President McKinley and he commanded General Alger to take action. In April 1899, the harbor citizens hosted a great barbecue so that guests could watch the first rocks pushed off a barge and the breakwater begun. Senator Stephen White had of course come home to a hero's welcome, but he died in 1901 at the age of 48. The Los Angeles Times called him "the greatest man the State has produced in the half century of its existence" (ref. 7).

The Walker Board had recommended a detached breakwater beginning 1,900 feet off shore and so it was designed. Because rock from Santa Catalina Island proved unsatisfactory, another source was found near Riverside (ref. 8). This switch made it necessary to call on Southern Pacific trains to haul the rock out over the water on a railroad trestle built along the line of the breakwater. The substructure of rubble rock went down into water 48 to 50 feet deep and was 200 feet wide at the base. Where it met the superstructure at low tide, a ledge or berm strengthened the wall. Eight-ton rectangular rocks were set in place to create a superstructure 20 feet wide at the top and 14 feet above the sea at low tide. The breakwater as originally planned was completed in 1910, but the gap at the headland proved to be a mistake. With additional appropriations the gap was closed and the east end extended. Completed, the breakwater ran 11,080 feet. In 1932, work began on a 12,500-foot middle breakwater. The San Pedro, the middle, and the Long Beach breakwaters total almost 47,000 running feet and with the entrances constitute the longest breakwater in the world.

Angels Gate Lighthouse, the Los Angeles Harbor Light, capped the east end of the breakwater in 1913. James Gibbs in his book West Coast Lighthouses reports that its

construction is not like that of any other on the West Coast. It has a heavily braced steel frame and concrete plaster walls designed to allow for settling of the breakwater. The monolithic blocks of concrete and the tower that rises 73 feet have survived major impacts. On one occasion, a 5-day storm left the structure with a slight tilt; on another, windows 35 feet above sea level were broken by the waves; then a huge battleship struck the jetty below. The Los Angeles Harbor Light survived without damage (ref. 9).

Because of the historic importance of the Free Harbor Fight, the San Pedro breakwater and the Angels Gate Lighthouse should be nominated for inclusion in the National Register of Historic Places. The fact that the breakwater was built in San Pedro instead of Santa Monica is what historians call a watershed. The decision changed the course of economic and geographic development in Los Angeles and thus the lives and environment of large numbers of people. As the reports of the U.S. Army Engineers demonstrated, San Pedro Bay was far superior to Santa Monica Bay in natural endowments. Further, free competition and open commerce have made the spacious Port of Los Angeles the greatest port on the West Coast. We can only speculate about where the other historical route would have taken us had Collis P. Huntington located and owned the city's harbor. This is the most thoroughly researched event in harbor history. The condition of this site is good. A bronze statue of Senator Stephen White stands today before the Courthouse at First and Hill Streets in Los Angeles. This statue or a duplicate of it could well stand on the wide walkway where sightseers leave the headland behind the Cabrillo Marine Museum to mount the breakwater.

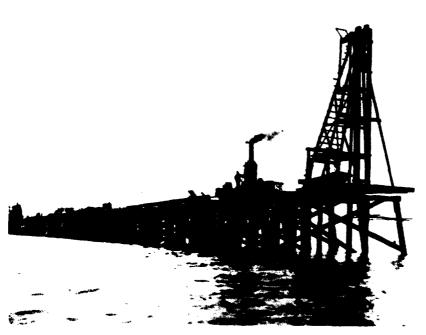
3-7. Fort MacArthur, Upper Reservation Site: Battery Osgood-Farley, Battery Barlow-Saxton, Battery Merriam-Leary, Sentry Dog Cemetery, and Korean Friendship Bell

The Upper Reservation is a 116-acre tract most of which was purchased in 1910 from private land developers. Fort MacArthur's harbor defense plans called for all primary



Prying stones from flatcars for the breakwater in 1903.

U.S. Army Corps of Engineers, Los Angeles District



Pile driver at outer end of breakwater trestle in 1903.

U.S. Army Corps of Engineers, Los Angeles District



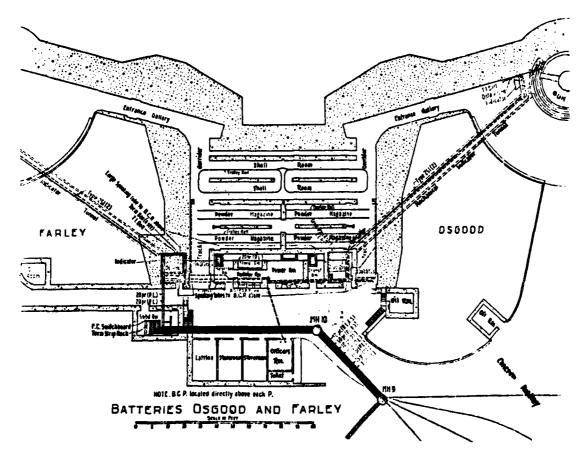
Derrick unloading stones for the superstructure.

City of Los Angeles Harbor Department



Angels Gate Lighthouse

City of Los Angeles Harbor Department



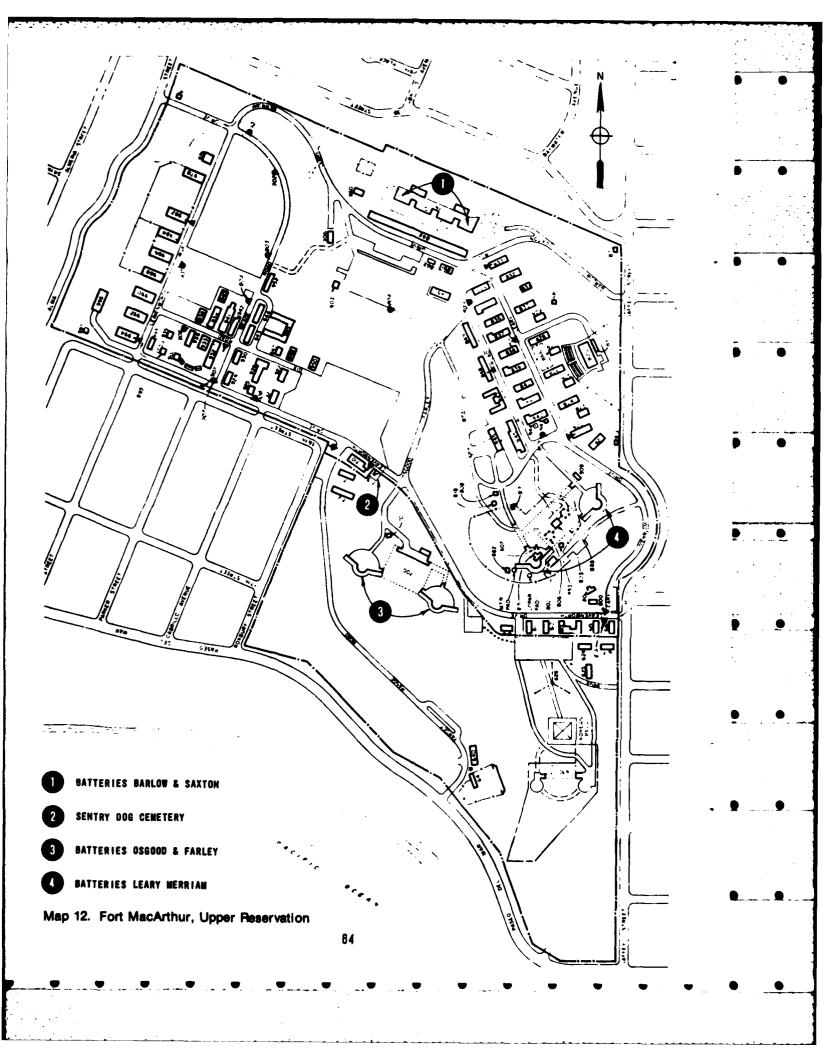
Plan of underground rooms, tunnels, and entrances servicing the emplacements for the disappearing rifle (cannon) carriages of Batteries Osgood and Farley.

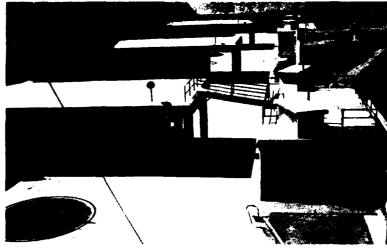
Courtesy of Col. Robert E. Freeland, Fort MacArthur,

fixed armament to be located there, and gun emplacements were begun in 1914. The site is bounded by Gaffey Street, 30th Street, Alma Street, and Paseo Del Mar (map 12).

The historical resources consist of the already marked Battery Osgood-Farley, certified for nomination by the State Historic Preservation Officer on February 18, 1976; the Barlow-Saxton Battery; the Merriam-Leary Battery; a sentry dog cemetery; and the Korean Friendship Bell. The area of about 37 acres where Batteries Osgood and Farley, the sentry dog cemetery, and the bell are located is presently under the control of the City of Los Angeles. The General Services Administration

has declared the entire area excess surplus land and it is presently in transition between that administration and the City of Los Angeles. The city should maintain these properties in perpetuity; however, it is recommended that a reversion clause be included in the land transfer to the effect that if the historical sites are not properly maintained, the property should be returned to the Federal Government for proper administration.





Block houses of the Batteries Barlow and Saxton; 12-inchlong tube mortars, four per battery, or a total of eight mortars.

U.S. Army photograph

Korean Friendship Beil (Site 3)

The Bell of Friendship, a Bicentennial gift to the United States, was dedicated October 3, 1976. The inscription on the bell has as its theme freedom and independence. A part of it reads:

The Bell of Friendship is patterned after the Bronze Bell of King Songdok which is the largest Oriental bell in existence. The Bell of King Songdok was constructed in A. D. 771. Unlike Chinese bells, the Korean bell has a sound tube on top of the bell, which is hung in a low pavilion and struck from outside. This is different from western bells which are hung in tall belfries and rung by a clapper suspended inside. The Korean bell is hung low to the ground so that the sound can reverberate against the earth and escape through the sound tube. Korea has not, since the eighth century, cast such a big bell as this Bell of Friendship.

In casting the bell, modern technology of cast-metal was used as little as possible, and the ancient method of bell casting was followed. Completed in a period of six months, the bell measures 3.67 meters high with a circumference of 7.25 meters and a diameter of 2.27 meters. It weighs 17 tons.

Four pairs of figures consisting of the Goddess of Liberty and a Korean spirit are engraved in relief at equal distances on the body of the bell. The Goddess of Liberty is placed side by side with a Korean spirit because it has a special meaning for American independence. The figures stand on drifting clouds and the rising sun is engraved above their heads and between raised hands. The first Korean spirit holds up a symbolic design of Korea's national flag, the second one a branch of rose of Sharon, which is Korea's national flower, the third a branch of laurel as a symbol of victory, and the fourth a dove as a symbol of peace.

The bell calls for recognition in this report; however, its recency does not recommend it for marking at this time. The City of Los Angeles is seeking funds to landscape the 33 acres surrounding the bell pavilion in traditional Korean style. If the three bunkers and the sentry dog cemetery are properly marked, perhaps landscaping plans should be readjusted. The description of the bell comes from a fact sheet published by Councilman John S. Gibson, Jr., President, Los Angeles City Council.

Battery Installations (Sites 4, 6, and 7)

The three battery installations are typical examples of fortifications used for coast and harbor defense during the turn and first part of this century. The cemetery and the Korean Bell are representative of the World War II and Cold War eras. The original nomination for the Osgood-Farley Battery was submitted by a Federal agency, Facilities Engineering, U.S. Army, HQ, 7th Infantry Division and Fort Ord. According to Mr. Gene Itogawa of the State Department of Parks and Recreation Resources Agency, if the original nomination is submitted by a Federal agency, it becomes that agency's responsibility to enlarge the site. An onsite inspection of the three gun emplacements and the cemetery and a sense of their historic importance suggest that the Osgood-Farley nomination be revised to include the Merriam-Leary and Barlow-Saxton Batteries. Mr. Itogawa suggested that the World War II and Cold War theme of the other historical resources would be incompatible with that of the batteries. In addition, they do not have a 50-year history. Thus, it is recommended that only the sentry dog cemetery be recommended for State recognition and marking. If the City of Los Angeles does maintain this land, the city might treat the five historical resources as the basic elements of a historical park, landscaping and organizing them in a manner that would make them resources for the scholar and points of interest for the tourist.

The Battery Osgood-Farley is described on the copy of the National Register of Historic Places nomination form in the appendix. The Merriam and Leary emplacements are identical to the Osgood-Farley, having been completed in the same year, 1917, and inactivated at the same time, 1944. Both held paired 14-inch guns. An excellent description of the emplacements appears in the appendix. Battery Osgood-Farley is there described as a "representative portion of the defense system that existed during the period 1917-1947." The Barlow-Saxton Batteries differ from these batteries in that each was designed for four 12inch-long tube mortars per battery. They were also completed in 1917. The underground storage and work rooms and the tunnels through which vehicles drove in and out with supplies are best maintained in Barlow-Saxton Batteries. The gun emplacements lie well below ground level in a large pit. Behind the round baseplates and working area are plotting-switchboard-radio rooms with large digital directional guides facing out toward the loading area. In other respects the construction resembles that of the 14-inch gun emplacements.

From a historical point of view it would be a great loss if any one of these three emplacements were to be destroyed. The United States has escaped the kind of warfare that plagued Europe for centuries and caused the nations there to construct massive fortifications. Consequently, we have comparatively little to study. These emplacements are all that remain of the largest and most powerful fixed coast defense artillery on the West Coast. Further, "Fort MacArthur is the only Taft period fortification in the continental United States (others being Endicott period or prior, and World War II) so its emplacements are somewhat different than those found in San Diego, San Francisco, Columbia River, Puget Sound, etc." (ref. 1). With the introduction of aerial warfare such fortifications are destined to remain forever obsolete. Even Fort MacArthur lies close to being marked off as disposable land. These rare sites provide a resource for students of the history of technology and warfare and bring alive the written word upon which we too often depend. A hundred years from now their value as tools to uncover the history of land defense will be even greater.

The three batteries need maintenance. The basic reinforced concrete is in good condition, but the doors lie in disrepair and weeds and debris litter the tunnels. At Osgood-Farley a handsome marble panel that serves as the backing for an electrical switchboard is a temptation to vandals. All three emplacements should be on the National Register of Historic Places.

Sentry Dog Cemetery (Site 5)

North of the Osgood-Farley Battery and behind a chapel no longer in use lies a cemetery for guard dogs. Each grave is marked with a heavy concrete marker. Brass and steel plates are attached and on them engraved the designation "Sentry Dog", the dog's name, and the birth and death dates. Vandalism has left its mark; however, many are still complete. The grass is long and unkept. Guard dogs served in World War II and in Vietnam and many received training here. The cemetery, which yields information through date markings on the use of sentry dogs, may easily be included in the suggested park site. A State designation is suggested.

8. One Hundred Varas Square

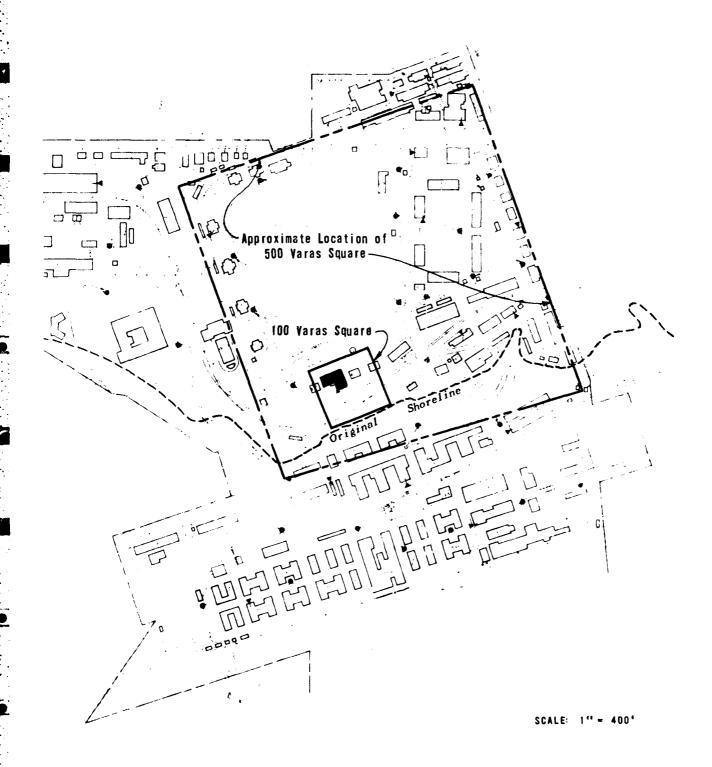
This site lies in the Lower Reservation of Fort MacArthur (map 13). The Kingdom of Castile originally granted land in the Americas under a policy by which absolute title to all land was vested in the Spanish Crown. By the 18th century the Laws of the Indies had been somewhat altered to stimulate settlement on the frontiers, and private ranchos were allocated with clear title outside the pueblo and mission lands. Juan Jose Dominguez, a soldier who had marched with Diego de Portola into Alta California in 1769, petitioned for and received such a grant in 1784. The 74,000-acre Dominguez Rancho lay on the coastal plain south of the pueblo of Los Angeles, bordered by San Pedro Bay to the point where it met the Nieto grant. Dominguez drew complaint for neglecting his stock and for residing on his ranch for only brief intervals (ref. 1). In his will he named a Spaniard, Manuel Gutierrez, executor, and Gutierrez in turn gave Jose Dolores Sepulveda permission to graze cattle

on the Palos Verdes tract of the San Pedro Rancho. Sepulveda proceeded to build a home there and to exercise full control. What arrangement he had with the executor we do not know, but dispute over the land arose during the lifetime of Dolores Sepulveda and carried on into the lives of his heirs. In 1846 the affair was finally settled when Governor Pico awarded Jose Loreto and Juan Sepulveda the 11 square leagues of the Palos Verdes tract in return for military services rendered by their father (ref. 2). Following upon the policy established in 1827 when the first Dominguez-Sepulveda dispute was temporarily settled, Pico reordered that:

They shall leave free on the beach at San Pedro five hundred varas square, to the four cardinal points, upon which houses may be built by persons who may obtain permission to do so; they shall not be permitted to prevent the use of water and pasture by persons engaged in traffic with oxen or horses to the Port of San Pedro (ref. 3).

In effect the Mexican Government reserved this tract for itself, and the United States would claim the same reservation by Government transfer some years later. The tract had 1,400 feet of water frontage (ref. 4).

The bluff at San Pedro within the 500 varas square had so long been the site of commercial activity that the decree largely followed upon practice. The San Gabriel Mission had embarcadero and storage rights to a smaller square of 100 varas in the southeast corner. Here they built what is believed to have been the first house at San Pedro Bay. Historian James Guinn wrote that in the proceedings of the ayuntamiento of 1835" a house is spoken of as having been built there long ago by the Mission Fathers of San Gabriel." Guinn quesses at the dates 1815 to 1820, and when he wrote in 1901 he described the ruins as still extant (ref. 5). He located the house as halfway between Point Fermin and Timms Point. This is assumed to be the same house described by Richard Henry Dana who sailed on a hide drogher in 1834.



Map 13. One Hundred Varas Square



Ruins, circa 1900, of one of the first buildings at San Pedro on the Hundred Varas Square.

City of Los Angeles Harbor Department

Captain Shaler reputedly brought the first American ship into San Pedro Bay in 1805, unloaded contraband goods in exchange for provisions, and initiated the trade in otter skins. He records no house. His log undoubtedly caused other contraband traders to seek out the port and to open up the cowhide and tallow trade. Guinn records an increase in cattle from 10,000 in 1822 to 42,000 in 1830 on land owned by Los Angeles citizens, obviously to meet the new demand (ref. 6). In 1822 William Hartnell, an Englishman working out of Lima, Peru, visited the San Gabriel Mission "making a contract with Padre Payeras, the prefect of the missions, for the purchase of hides and tallow" (ref. 7). Hartnell's company used the point for hide collection and storage from 1822 to 1828. The adobe storage house was still there, and a few years later Richard Henry Dana wrote:

> Going up this hill with them, we saw, just behind it, a small, low building, with one room. containing a fireplace. cooking-apparatus, & c. and the rest of it unfinished, and used as a place to store hides and goods. This, they told us. was built by some traders in the Pueblo, (a town about thirty miles in the interior, to which this was the port,) and used by them as a storehouse, and also as a lodging-place when they came down to trade with the vessels (ref. 8).

After the harbor lines were drawn in 1907 the bay was filled from the bluff east to the present-day West Channel. However, in Dana's time the water came right up to the bluff, and to reach the hides collected around the adobe house on the 100 varas square, he and his shipmates had to scale the cliff. They approached in longboats laden with the usual assorted cargoes from Boston, and he described the landing.

After landing and rolling them over the stones upon the beach, we stopped, waiting for the carts to come down the hill and take them; but the captain soon settled the matter by ordering us to carry them all up to the top, saving that, that was "California fashion". So what the oxen would not do, we were obliged to do. The hill was low. but steep, and the earth, being clavev and wet with recent rains, was but bad holdingground for our feet....Now, the hides were to be got down; and for this purpose, we brought the boat round to a place where the hill was steeper and threw them down, letting them slide over the slope. Many of them lodged, and we had to let ourselves down and set them agoing again; and in this way got covered with dust, and our clothes torn. After we had got them down, we were obliged to take them on our heads, and walk over the stones, and through the water to the boat (ref. 9).

The hide house or warehouse was owned in Dana's time by Abel Stearns who like a few other foreigners settled in the pueblo Los Angeles and traded in hides and tallow. Stearns had bought the adobe building from the San Gabriel Mission in the early 1830's while the secularization of the California missions was in progress. Stearns wanted to expand the warehouse facilities with additional buildings and to bring in water from a spring several miles away. Some of the local people objected to his establishing such a commercial center. claiming that it would attract contraband trade. They cited Spanish law that prohibited buildings on the beach where there was no customs house. Governor Figueroa granted Stearns permission to bring in water, but Steams built no other buildings on the 100 varas square (ref. 10).

The firm of Juan Alexander and John Temple acquired valid claim to the square (1.77 acres) in 1848. After Phineas Banning entered the firm he moved the business to the Wilmington Lagoon. Because this was 4 miles closer to Los Angeles, most of the general trade moved to his wharf, and the stores and old adobe hide house fell into disuse. Squatters moved in and set up sheep corrals. When Dana returned to the site in 1859, he saw two houses on the hill. A legend grew that buried treasure lay near the old house, and it became a magnet for treasure hunters for years (ref. 11).

In 1874 the Southern Pacific acquired rights-of-way and extensive land holdings on the San Pedro bluff including title to the Alexander and Temple lot of 1.77 acres. The United States held claim to the same 500 varas square as reserved by the Mexican Government and this also included the 1.77 acres; thus, a dispute over ownership followed. On September 14, 1888, the "old government reserve on San Pedro Bay" was formally set apart as a military reservation by executive order. A decade later Southern Pacific gave in to the Government claims, too busy then with

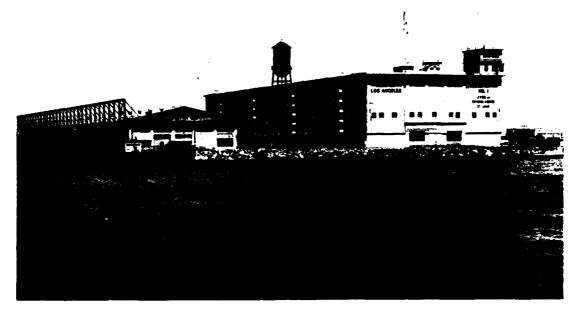
the fight over location of the Los Angeles Harbor to give it any time. Once the breakwater was built in San Pedro, the United States planned a complete defense system centered on the old Government reservation. Squatters were removed, sheep corrals torn down, and buildings removed. The old adobe ruins may have been among these.

As the history of this site discloses, the lives of nearly all of the significant persons of early harbor history are associated with it. The hide house is widely known through the works of Richard Henry Dana. This site is deserving of thorough research and possible inclusion on the National Register of Historic Places.

9. Los Angeles Municipal Warehouse Number 1

This building is at the southeast end of Pier No. 1, the old Huntington Fill, which lies between the Main Channel and the East Channel in the outer harbor. The warehouse, which may be reached by driving to the south end of Signal Street, is a six-story, reinforced concrete building. The floor area of about 500,000 square feet is divided into 72 rooms. The warehouse is equipped with electric elevators, whip hoists, and a sprinkler system fed by a 100,000-gallon water tank that is located on the roof. The Marine Exchange Lookout Station is also on the roof. The building has fireproof stairways on the outside above the second floor (ref. 1). The warehouse was completed in 1917, a product of the Los Angeles Harbor Department General Obligation Bonds. Historically, it is a symbol of change.

At the turn of the century and before the San Pedro Breakwater was built most of the cargo that came into San Pedro Bay was carried on coastal vessels. Los Angeles had built up a large import lumber business, but there was comparatively little other commerce. Shallow-draft lumber schooners were all the bay could accommodate. Stored lumber lay in stacks exposed to the elements. Warehouses were privately owned and relatively small. The Los Angeles Chamber of Commerce was well aware that even with the breakwater to accommodate deepwater vessels the port would not attract world trade unless facilities



Municipal Warehouse No. 1 with Marine Exchange Lookout Station on the roof. Looking north at the East Channel, 1947.

City of Los Angeles Harbor Department



Municipal Warehouse No. 1, September 1916.

City of Los Angeles Harbor Department

were improved. While the breakwater was under construction, the chamber became a driving force in removing obstacles to bring about that improvement. First, they activated a "shoestring" proposal by which the City of Los Angeles purchased a strip of land a half-mile wide from the city limits at Slauson Avenue to where it joined the city limits of both San Pedro and Wilmington. Secondly, the chamber helped pass a city ordinance to create a harbor commission, a three-member commission who set about drawing up a harbor plan.

The United States Congress then created a Harbor Line Board and all the slips, channels, bulkheads, piers, and turning basins as we see them now were created, first as lines superimposed on a map of the natural mudflats and sandbars and then dredged and filled into reality. The next step was to consolidate the harbor towns with the metropolis because without this consolidation the people of Los Angeles would not be willing to pay for the needed port facilities. The consolidation agreement with San Pedro and Wilmington, finalized in 1909, specified that Los Angeles would spend \$10 million on harbor improvement in the next 10 years. With the way finally cleared, municipal dredging and wharf construction began, and in 1915 construction began on Warehouse Number 1. It was a magnificent structure for its day: massive, modern, and yet decorated with Gothic gargoyles and water spouts. The City of Los Angeles was proclaiming its entrance into world trade with channels dredged to 35 feet and a safe and commodious inner and outer harbor that at least one enthusiast claimed would be adequate for a thousand years.

The historic changeover that began at the port in 1912 deserved recognition, but it is difficult to mark a whole harbor and not feasible to cite dredge and fill operations. We can best center our attention upon one or two facilities that mark off the beginnings of one of the greatest manmade harbors in the world because that is probably the most historic event that ever occurred in San Pedro Bay. Warehouse Number 1 is in excellent condition, is extremely visible, and its architectural style embodies the best features of its time. Further, it symbolizes the shift away from shallow-draft

lumber schooners to deep sea vessels that would bring varied cargo requiring a six-story concrete warehouse. This building should have recognition at the State level.

10. Harbor View Memorial Park, Old St. Peter's Episcopal Church

This cemetery is at the end of Grand Avenue, South San Pedro. The land for it was donated by August Timms, and the Rudecinda Chapel at its entrance bears the name of Jose Diego Sepulveda's daughter who with her immediate family are interred there. It was declared Historic-Cultural Monument No. 53 by the City of Los Angeles Cultural Heritage Board. The board's fact sheet on the resource may be found in the appendix.

11. Municipal Fish Market

When the City of Los Angeles voted for the first harbor bonds and initiated plans for the first wharf and warehouse, it also located a Municipal Wholesale Fish Market on the main channel at the head of the Southern Pacific slip. Over a span of 3 years dating from 1916, a long wooden market building was constructed where fishermen could clean and process their fresh fish for the tables of southern Californians. Located at Berths 79 and 80, the market served both as a commercial house and as a gathering spot for the oldtimers, many of them immigrants who brought their skills with them from ports throughout Europe. The DiMassa family founded its market in 1916 as did the Zankich Brothers (ref. 1). This colorful old landmark was torn down in 1951 and the fish wholesalers moved into a modern concrete building at Berth 72 the same year.

The new structure, 80 by 420 feet, was built on the end of a new pier constructed as part of the \$1,500,000 Fishermen's Wharf. Fish are cleaned and processed on the first floor; storage space, offices, dining rooms, and kitchen are on the second floor. The average monthly rental for one of the 12 markets in 1951 was \$270 compared to an average monthly rental of only \$50 in the old building; the higher rent in the new facility drew a good deal of complaint. Wholesalers in the building today provide fresh-caught fish to over 3,000 retailers.



Municipal Fish Market.

Harbor tours show off the building, one of streamlined and practical design but which yields little historical information. The Municipal Fish Market might be considered for a Los Angeles Historic-Cultural Monument.



Municipal Fish Market.

12. Dodson Residence

This residence, once the home of Rudecinda Sepulveda de Dodson and James H. Dodson, is at 859 West 13th Street, San Pedro. The residence was declared Historic-Cultural Monument No. 147 by the Los Angeles Cultural Heritage Board on September 17, 1975.

13. Timms Point and Landing

Until the 20th century this point lay below the San Pedro bluff just north of Deadman's Island (map 14). Today the point of land is gone, but the site may be described as along the Main Channel of Los Angeles Harbor near the Southern Pacific slip between 14th and 16th Streets in San Pedro. It is registered as California State Historical Landmark No. 384 and Los Angeles Historic-Cultural Monument No. 171.

Timms Point, which may aptly be called the first Port of Los Angeles, came into use as a landing at about the time of the gold rush. Los Angeles already had a few Yankee entrepreneurs such as Abel Stearns and John Temple, but it was also a time when trade and passenger business would increase rapidly and thus attract more pioneer Americans to the now recently acquired United States port. Ships still anchored out in the open roadstead of the bay and sent their goods and passengers to shore by rowboat, Diego Sepulveda, one of the heirs to the Palos Verdes Rancho in 1824. built the first wharf on the point of land and storehouse on the beach. He then began the first stage line to Los Angeles. Perhaps the primary change brought about in southern California by the gold rush was the greatly increased demand for beef. Cattle ranches flourished as never before and commerce followed.

Another by-product of the mining boom is said to have been the arrival of August Timms. Conflicting evidence places his arrival in the 1860's; thus we are not quite sure how and when Timms arrived in San Pedro. However, he is credited with improving and extending Sepulveda's landing and, after the 1860's, maps appeared calling it "Timm." The point bore the name Timms until its destruction. Timms'

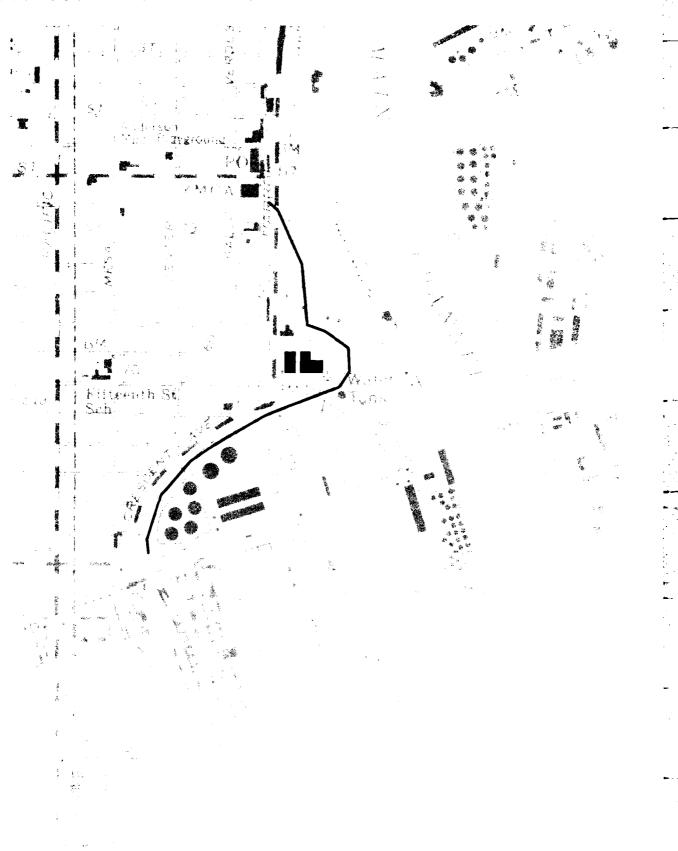
improvements were unique and consisted of towing the hulls of two shipwrecked vessels to the point, using the deck houses to live in, and taking advantage of the silt and sand deposited around the wreckage so that the point of land was quite enlarged.* The many photographs of the busy point as well as constant reference to it in shipping literature attest to the importance of the landing until in 1907 dredging made it unrecognizable.

Timms lived until 1888, apparently at his home on the point where he also had a hotel and bathhouse. He bought land, he owned some interests in Catalina Island, and he made a gift of the land for the Harbor View Cemetery to the people of San Pedro. He saw Los Angeles shipping move from the point to Phineas Banning's New San Pedro in 1857. He also saw business return to his point when Southern Pacific bought the land between Timms Point and the Wilmington Lagoon from the heirs of Palos Verdes Rancho. The railway acquired rights-of-way and brought its tracks out below the bluff to Timms Point. August Timms then had to defend his rights to the point but apparently was successful.

By the 1880's the channel below the San Pedro bluffs was much improved because of the jetty built in 1871 from Timms Point southeast to about 600 feet from the earlier built east jetty connecting Rattlesnake and Deadman's Islands. There the new jetty paralleled the east jetty for half a mile or to a point a short distance beyond Deadman's Island. Scouring caused by the tides deepened the channel by Timms Point to 14 feet; dredging then deepened the channel to 20 feet.

After the Federal Breakwater was approved, San Pedro leased parts of the outer harbor for fill. One of these leases, the Miner concession, lay just south of Timms Point; when the work was complete the harbor lines began to take on the shapes they have today. Also, by 1907 Southern Pacific owned Timms Point and in that year contracted for the

*Timms is said to have hauled in the Mary Jane in 1852 and the Abraham Lincoln later. However, a literature search did not disclose any documented verification of this.



Map 14. Timms Landing



San Pedro Harbor entrance from the bluff showing the jetty going out from Timms Landing toward Deadman's Island, 1883.

Title Insurance and Trust Company

dredging of three ship slips there, each to a depth of 30 feet. Thus, the romantic point, once almost obscured by the crowded masts of sailing ships, became completely obscured by progress. Mrs. Florence Dodson Schoneman, granddaughter of Diego Sepulveda, who tried to locate Timms Point for the California History and Landmarks Club in 1941, found that the point had been so "dredged about, leveled off and built upon" that it was only with great difficulty that she could locate it.

The names of several aggressive and entrepreneurial Americans who typified the "out west" mentality are associated with

Timms Point. John Tomlinson bought the Sepulveda stage line and then became famous for his races with Phineas Banning to Los Angeles. Timms is reported to have raced and set a record of 1 hour, 55 minutes to Los Angeles in 1856.

Bachman's warehouse, Tomlinson's wharf, Sepulveda's landing, and Timms' buildings were the first structures at shore level at the future Los Angeles Harbor. Harbor history of this era is incomplete and needs a thorough study through primary resources. This site is presently a California State Landmark.

14. Municipal Ferry Building

This building, which sits on the Main Channel of the Port of Los Angeles at the foot of Sixth Street in San Pedro, was built in 1941 to accommodate the ever growing automobile and pedestrian traffic to and from Terminal Island. The structure is of the "streamlined moderne" style characterized by its plain surface, severe detailing, and rounded corners. This architectural style was popular in Los Angeles in the late 1920's to the early 1940's; however, few examples remain that are structurally sound and safe and in the excellent condition found here. With the completion of the Vincent Thomas suspension bridge in 1963, the ferryboat service was discontinued. Since that time the building has housed offices of the Los Angeles Harbor Department.

Recently the Los Angeles Harbor Commissioners agreed to give a secure lease to the Los Angeles Department of Public Works so that it could direct the preservation of the building and the development of a Maritime History Museum. A recent Federal grant of \$1,080,000 will finance the venture, which should be completed by early 1978. The physical structure of the ferryboat building is ideal for a museum. The old building was built for literally thousands of people to pass through each day. Museum design will retain some of the old turnstiles, existing ramps, and unusual rooms. The museum will offer a Hall of San Pedro Bay History, a Hall of Nautical Archeology, a research library, and a museum store. Subsequent planning phases call for a Marine Art Gallery, a Hall of Maritime History, a history of the fishing industry, and the motion picture industry's seafaring activity.

In 1975 the Los Angeles Cultural Heritage Board designated the structure a Historic Cultural Monument, No. 146 in the Cultural Heritage Register. Because the building is only 35 years old and the architectural syle of little interest on a national level, this marking is appropriate. However, development of the museum will make this site an important local headquarters, and any change imposed upon it would have to be given careful consideration.



When the Vincent Thomas Bridge eliminated the need for ferry service across the Main Channel, the Ferry Building on Terminal Island, an exact replica of the one still standing at the foot of Sixth Street, was demolished.

City of Los Angeles Harbor Department



The Ferry Building built in 1941 will become a Maritime History Museum.

City of Los Angeles Harbor Department

15. Fireboat 2 and Firehouse 112

The Ralph J. Scott, better known as Fireboat 2, is located at Berth 227 at the foot of Old Dock Street, San Pedro. It was declared Historic-Cultural Monument No. 154 by the Los Angeles Cultural Heritage Board on May 5, 1976.

This 52-year-old fireboat was built at Los Angeles Shipbuilding and Drydock Corporation (now Todd Shipyard) at a cost of \$214,000 and launched October 20, 1925. In 1969 the boat was modernized at a cost of \$238,000, and replacement cost is conservatively estimated at \$2,250,000. Despite its age, Fireboat 2 is actually one of the most up-to-date fireboats in the world and should be in use for many years. The boat has fought many major fires; its pumping capacity was demonstrated on August 8, 1972, when it pumped into fifteen 2-1/2-inch hose lines and two 3-1/2-inch hose lines, providing water for land companies. Firehouse 112 serves as home base for Fireboat 2. The long service of Fireboat 2 has made this boat a logical choice for a local historical resource.

16. Vincent Thomas Bridge

This bridge, which spans the Main Channel of Los Angeles Harbor where it meets the Turning Basin, connects Terminal Island with the mainland. It was opened November 15, 1963, and thus has a short history. However, it replaced a wholly inadequate ferryboat run and encouraged a new surge of development at the harbor. Named for Assemblyman Vincent Thomas whose efforts forged the legislation needed for construction, the bridge spans 6,050 feet. It was the first large suspension bridge in southern California and the third largest in California. The bridge will surely be of interest to future historians; however, its recency stands in the way of note as a historical resource at this time.

17. Terminal Island School

The school, located at 333 Seaside Avenue, Terminal Island, presently houses the Marine Corps Reserve Training Center. Although a well-known resort, a town named East San Pedro, and the beginnings of what is

now the largest fishing industry in the country went together to make a colorful history for Terminal Island, no old landmark remains except this public school. It does not possess high artistic value but does embody the distinctive characteristics of its period. More importantly, the school is associated with the lives of the children of the beautiful little beach community and the children of the cannery workers. A brief history of the island relates readily to the broad patterns of history on the national and world levels.

Competition for railroad terminals opened up the island in 1891 when a St. Louis corporation purchased the narrow sand spit of Rattlesnake Island from the Dominguez heirs. Southern Pacific had a terminal monopoly on the west side of the San Pedro Bay channel. The St. Louis company broke that monopoly by running a railroad from Los Angeles along the east side of the Los Angeles River, over to the island on trestles, and to its west end where the company established terminals on deep water. They changed the name from Rattlesnake to Terminal Island and began development of a resort community where city dwellers could buy lots and build beach houses or commute for the day via the new railroad. Brighton Beach, as the new community was called, soon attracted visitors who came directly by the Los Angeles Terminal Railway or by Southern Pacific and crossed over the channel by small boat.

At the same time that the resort community flourished, the fishing industry was beginning on the east side of the island. In 1893 the machinery of the Golden Gate Packing Company was brought to East San Pedro during one of the sporadic depressions in the San Francisco Bay sardine and anchovy industry. Alfred P. Halfhill was one of the owners of what they then called the Southern California Company. It began purse seine fishing for sardines around San Pedro. Redondo, and Santa Catalina. In 1903 sardines disappeared and Halfhill looked for another species of fish to can. He found a tin of Italian "Tunny" by chance, and thus the tuna industry was born in East San Pedro. Halfhill tried to find some type of fish for commercial canning, experimenting with albacore, halibut, and cod.



East San Pedro, Terminal Island, before widening the channel to 1,000 feet. Workers' houses built up on pilings along the main channel were torn down and shoved out of the way.

U.S. Army Corps of Engineers, Los Angeles District

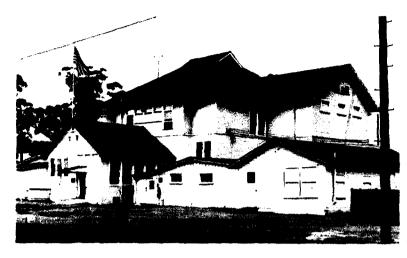
Albacore, although a popular sport fish for Americans, was considered inedible and was called "the hog of the sea" because it held such large amounts of blood. Halfhill found that steam applied to its flesh turned it snow white and also made the albacore look and taste like chicken. He packed 700 cases in 1903, but grocers returned a sizable part. To promote albacore, he convinced grocers to give it away free with coffee. This and other promotional efforts were successful. Halfhill called his product "chicken of the sea"; this slogan later became the trademark of Van Camp Seafood Company (ref. 1).

The Japanese entered the fishing industry early. One study made in 1931 and based largely on interviews tells us that a small group of young Japanese men got into the abalone business at Whites Point in 1901, others fished the area between Whites Point and San Pedro in 1906 and 1907, and a large number lived in

East San Pedro. By the summer of 1907, the writer Kanichi Kawasaki estimates there were 600 Japanese fishermen living in East San Pedro (ref. 2).

Thomas Wolfe, in his study of the fishing industry, tells us that in San Diego, even in 1919, 85 percent of the fish were brought in by Japanese fishermen using hook and line. The big purse seiner fleets came into being after World War I. Thus, we can speculate that many of the Japanese on Terminal Island until the 1920's were engaged in fishing from small boats. Kawasaki writes of the first arrivals in 1906 who "drove lumber piles on the shore of the main channel at East San Pedro and built about twenty houses" (ref. 3).

Japanese fishermen were not alone in East San Pedro. Gamblers, artists, and European fisherfolk also lived there. Charles Fletcher Lummis, a one-time city editor for the Los Angeles Times also had a home there (ref. 4).



Terminal Island schoolhouse. Upper story is original structure built in 1897.

However, until World War II the Japanese constituted by far the majority of workers in the canneries. Halfhill pioneered the tuna industry, but in 1912 the White Star Canning Company opened its wharves in East San Pedro and soon afterwards Frank L. Van Camp opened a large cannery at the head of the Southern Pacific slip on the west side of the channel. During World War I a fire destroyed the Southern California Company, and because the company had contracted for a large amount of canning needed nationwide, harbor developers turned their attention to the fish industry. The Board of Harbor Commissioners decided to create a special harbor. Clarence Matson, Traffic Manager for the Los Angeles Harbor, wrote of how the harbor engineer "formulated a plan to fence in a piece of the Pacific Ocean" on the southwest end of Terminal Island. The engineer Jubb:

...designed a seawall to enclose an area of thirty acres of water on the southerly side of Terminal Island and east of the filled area. A wooden wharf about two thousand feet long was built across the north side of this area, and the area behind was filled in with dredgings, making a considerable acreage of solid ground. A low breakwater was built across the southerly side of the area enclosed by the

seawall, thereby giving a completely protected harbor for fishing boats. The land back of the wharf was divided into lots each with a hundred-foot frontage on the wharf, and running back four hundred feet to a street and a railroad track. Another street ran down to the wharf in the middle of the tract, affording frontage for business houses (ref. 5).

Dredging and wharf construction began in 1915, and the following year the Fish Harbor project was completed.

Within a few months all of the space provided by the new fish harbor had been leased, two or three plants had been established to build and repair fishing boats, and some of the leading oil companies had built oil stations to service them. It was the most complete plant of its kind on the Pacific Coast, if not in America (ref. 6).

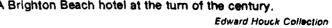
Soon after this, more than 3,000 Japanese could be counted on Terminal Island. This was the era when the intersection of Tuna Street and Terminal Way became the heart of the community. By World War II, some 2,000 Caucasian workers also lived on the island.



P. 81

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Changes brought about by the San Pedro Breakwater in 1910, the dredging at Fish Harbor, and finally the Reservation Point fill so altered the south side of Terminal Island that Seaside Avenue, where the Terminal Island School had once served a community by the sea, was almost a mile inland. Resort homeowners were replaced by cannery and industrial workers, and the shacks at East San Pedro were shoved out of the way as new wharves went up on the valuable property facing the Main Channel of the Los Angeles Harbor. During the war the Japanese were removed and the Caucasian workers were forced to leave soon after. The military took over the old Terminal Island School.

Major A. Mediavilla and Captain D. W. Zimmerman of the U.S. Marine Corps have both communicated with Councilman John S. Gibson's office in regard to preservation and marking of the Terminal Island Schoolhouse. The building is well preserved because of periodic exterior painting and patch jobs; the interior has been remodeled in a minor way to accommodate the Marine Corps training program for reserves, but the second story appears to be in its original condition except for some ceiling acoustic material placed over the original stucco. The wood finish and cabinet work is basic and is typical of public buildings of the late 19th century. Captain Zimmerman reports that the upper story, the original building constructed in 1897, is the oldest building extant on Terminal Island. The present lower story, which serves as a foundation for the old school, was built later.

The Marine Corps facility faces Seaside Avenue, but the front door of the old school is at the back, facing the railroad tracks. The Corps owns 6 acres here that the Los Angeles Harbor may want. The property could be fenced off at the approximate side boundaries of the present buildings and the fence brought up to Seaside Avenue. All existing sheds could be removed as well as those attached to the original school. The school with its spacious classrooms could then become a museum for Terminal Island much as the old Ferry Building in San Pedro will become a museum for that area. The Los Angeles Department of Parks and Recreation or the State Department

Parks should assume responsibility for the school and maintain it. Parking and plantings could occupy the space between the school and Seaside Avenue. It should be nominated for inclusion in the National Register of Historic Places.

18. S. S. Catalina

This ship is presently located at Berth 96, Los Angeles Harbor. It was listed in the National Register of Historic Places on September 1, 1976 and is also registered as California State Historical Landmark No. 894. The nomination form for the National Register is included in the appendix.

19. Site of Home of Diego Sepulveda

This site, now in a commercial district at 761 Channel Street near the intersection of Channel and Gaffey, San Pedro, was once the home of Diego Sepulveda. It is registered as California State Historical Landmark No. 380, and a copy of the application for registration is included in the appendix.

20. Berth 145, Los Angeles Harbor

The site is on the east side of West Basin and may be reached by driving south on Neptune Avenue and following the railroad spur line out to the berth.

Close to 4,200 family heads in the area belong either to the International Longshoremen's and Warehousemen's Union, Local 13, or to its Pensioners Club. Berth 145 is, for them, for the labor organizations at large, and for all students of social history, an important landmark because it symbolizes San Pedro's role in the maritime strike of 1934.

The plight of longshoremen and seamen during the 19th century is well known, and Richard Henry Dana's book Two Years Before the Mast, referred to earlier in this report, serves as documentary evidence of the deplorable working conditions of seamen a century before the strike. A gruesome beating Dana witnessed aboard ship took place just outside San Pedro Bay. In 1933 and 1934 seamen and cargo handlers became organized on the West Coast. They had suffered not only from conditions related to their work but also



Courtesy of Gordon Giblin

A portion of the San Pedro crowd of 10,000 who gathered on July 5, 1959, to commemorate Bloody Thursday at Berth 145.

from society's disapproval; they were commonly looked upon as roughnecks, misfits, and failures.

An early attempt by West Coast longshoremen to organize in 1916 failed when San Francisco businessmen formed a Law and Order Committee to protect the status quo. Robert Dollar, a San Francisco shipping magnate, declared at the time that sending ambulance loads of pickets to the hospital was the way to end the strike. Employers succeeded in ending the strike and then passed an antipicketing ordinance to prevent future "disorder". A 1919 strike ended in similar fashion and the shipowners set up their own Union of Longshoremen, commonly called the Blue Book Union. It served waterfront workers, including those in San Pedro, until 1933 when the Regional Labor Board created by the National Recovery Act specified that workingmen had a right to join a union of their own choosing. With their way cleared, most Pacific Coast dockworkers joined the International Longshoremen's Association (American Federation of Labor), and the socalled "long peace" enjoyed by the employers came to a close. The long peace had been at

labor's expense and longshoremen now sought reform in two critical areas: hiring practices and income equalization. Wage and hour improvements were secondary issues. Mike Quinn describes the old job search in the following paragraph.

To obtain work, men got up before dawn, hovered about the waterfront or trudged from dock to dock. Sometimes a man would be three or four days or a week connecting with a job. Once at work he might labor 24 to 36 hours at a stretch and there are cases on record of men who worked as long as 72 hours to a shift. The job might last one day, two days or only a few hours. Then he'd have to look for another (ref. 1).

Competition for jobs was so great that bribing straw bosses and hanging around the waterfront saloons waiting to buy hiring bosses a drink was common. Once hired, the speedup system prevailed. This meant that after a man deposited a load he had to run back to pick up

the next. The \$0.85 per hour the worker earned appeared high but in fact amounted to so little that he could hardly support himself, let alone a family. This partially explains why a preponderance of longshoremen remained single.

In February 1924, the International Longshoremen's Association on the West Coast held a meeting of the rank and file workingmen and formulated a set of demands. A delegation of workers presented these to the shipowners who responded by calling the workers communists and demanding to negotiate with paid union officials rather than the rank and file. The union compromised and sent salaried officials to negotiate. When after several weeks of desultory negotiations and Federal mediations no satisfactory settlement had been reached, the Union voted to walk out on May 9. The shipowners immediately hired private guards to aid the police and arranged to lodge strikebreakers on the docks to protect their labor supply. At Berth 145 in San Pedro, a compound was constructed on the east side of the warehouse. A Japanese freighter moored in the West Basin was used to provide food and accommodations for the strikebreakers. On May 14, 1934, the Los Angeles Times reported that "shipping was moving in and out of the port yesterday at a more normal pace than at any time since the beginning of the strike." The scabs or "replacement workers" were nullifying the effectiveness of the strike, which had been approved by over 90 percent of the union members. On the night of May 15, union members broke into the compound at Berth 145. Police and private guards, firing rifles and tear gas, killed two workers and seriously wounded five others. Scores of others were clubbed and many more arrested. The port was quiet on the following day. The Los Angeles Times blamed the violence on "sluggers and radical agitators" imported from the east.

But the killing produced a wave of resentment along the coast, and huge funeral marches of 5,000 in San Pedro and 10,000 in San Francisco took place. On July 9, the union called a general strike in San Francisco and by year's end the union was victorious. No other single year, before or since, brought such radical change for the San Pedro workingman. Hiring practices were revolutionized.

When a longshoreman is hired in San Pedro today, his initial acceptance to a "registration force" (job list) results from action taken by a Joint Labor Relations Committee of union and employer. The union has influence sufficient to ensure that work is evenly distributed and incomes are equalized. The era when finding a few hours or days work was as wearing as the job itself ended in 1934. As wages and working conditions have improved, so have the living standards of dockworkers. But more importantly, fair hiring practices enable longshoremen to live as dignified members of society.

Longshoremen on the entire West Coast to this day pay tribute on July 5th to the martyrs of "Bloody Thursday" who were shot down 25 years ago. On "Bloody Thursday" 1959, 10,000 longshoremen and their families congregated at Berth 145 for a commemoration ceremony.

The confrontation at Berth 145 made a significant contribution to the broad pattern of labor history and the site, which is in good condition, should be designated a State Historical Landmark.

21. Berth 158, Pier A, Oldest Wharf, Los Angeles Harbor

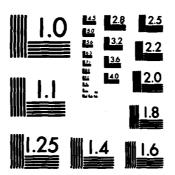
This pier is on the northeast side of Slip 1 in the inner harbor. Pier A Street, which lies behind the wharves, is approximately where a shallow channel took lighters from Banning's dock in Wilmington out to San Pedro and the ships that waited in the bay. The first improvements financed by municipal bonds in the Wilmington area were made on 37 acres of submerged lands north and east of what is now Slip 1. Dredging began in 1912, and Clarence H. Matson who was present describes the opening of Pier A in August 1914:

Coincident with the opening of the Panama Canal the American-Hawaiian Company started two of its ships on the Atlantic through the Straits of Magellan so as to have them ready to load on the Pacific for the eastbound voyage through the Canal as soon as practicable after the Canal

LOS ANGELES-LONG BEACH HARBOR AREAS REGIONAL CULTURAL HISTORY LOS ANGELES COUNTY CALIFORNIACU) ARMY ENGINEER DISTRICT LOS ANGELES CA L J WEINMAN APR 78 F/G 5/6 UNCLASSIFIED NL

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MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A



A view southwest showing progress in the construction of the transit shed at Berths 156 to 158, Pier A, November 1913. Berth 158 was open for traffic the following year.

City of Los Angeles Harbor Department

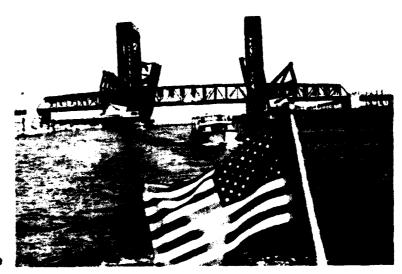
should be opened. These two ships arrived at the Wilmington pier approximately at the same time as the first ship that came through the Canal westbound, so that the company had three big vessels at Pier A at the same time. It made a magnificent opening for the former port of Wilmington that had not seen a ship at dock for twenty-five years (Matson, p. 90).

Berth 158, Pier A Wharf, is now the oldest dock in continuous use at the Los Angeles Harbor. Whether this fact creates a historical landmark is questionable. The buildings are not unique, nor are they uncommon at the harbor. Berth 158, which bears a plaque recording its historic role, is included in this report so that caution will be used if any major changes are planned in this area.

22. Badger Avenue Bascule Bridge (also called the Henry Ford Bridge)

This bridge is at the boundary of Los Angeles and Long Beach and crosses the Cerritos Channel from the north side of Terminal Island to the mainland. It parallels Long Beach's Heim Bridge at the foot of Henry Ford Avenue. This moveable steel bridge began operation in 1924 to serve vehicular, foot, and rail traffic to Terminal Island.

The bascule or counterweight construction finds its origin in the medieval drawbridges used to carry military traffic over waterways. A few counterweight bridges were constructed in Europe during the 19th century, but the art remained undeveloped until the 1890's when a much improved model with trunnions and roller bearings appeared. Good examples of this were the Scherzer rolling bascule in Chicago and the tower bridge of



Badger Avenue Bascule Bridge

London. They were built about the same time and are considered forerunners of the modern bascule. The bascule developed quickly due to the several advantages it offered: rapid operation; safety to land traffic because the open leaf acts as a barricade; fewer collisions with channel or river traffic; and relative economy of operation. Two drawbridges built in the Los Angeles Harbor district and one in the Long Beach Harbor district were bascules, but only the Badger Avenue Bascule Bridge remains.

The first of the Los Angeles bridges was the Strauss Bridge. During the late 19th century, the Southern Pacific Railroad and Pacific Electric interurban line reached San Pedro by means of deep-pile trestles built over the tidelands where the West Basin lies today. When harbor lines were drawn in 1907, it became obvious that the trestles would have to be removed if ships were to pass from the Main Channel and turning basin to the West Basin. In 1907 these plans were still on paper and to look at the mudflats and imagine channels and slips 30 feet deep with solid wharves at their sides seemed incredible to many local people who had never seen a large-scale manmade harbor. Tideland trestles lay in the way of inner harbor development in San Pedro and Long Beach, and developers had to seek Federal authority in both cases before they succeeded in having them removed. Access to the West Basin was finally granted when the Secretary of War ordered the construction of a bascule bridge over the entrance to the West Basin, July 22, 1911. The impressive new single-leaf bascule bridge is described in *Interurbans*.

It was 187 feet long and afforded a clear channel of 185 feet for ships. It was of the type known as a "Strauss" trunnion, and lifted on a pin or hinge. Electric motors lifted the ponderous span in fifty seconds, and a latch also operated by a motor held it in position when down. The King Bridge Co. of Cleveland built the superstructure, which was installed by the SP's Engineering Dept....The new bridge was sufficiently wide to accommodate two tracks (ref.

1).

This was one of the largest single-span drawbridges constructed up to that time. In 1955 the Strauss Bridge, as it was called, was damaged permanently by a veering ship, declared unsafe, and removed. Rail traffic was rerouted around the West Basin.

In 1923 the Port of Los Angeles, to meet the fast growing needs of traffic between the mainland and the north side of Terminal Island, signed a contract with the American Bridge Company for the Badger Avenue Bascule Bridge. It was completed the following year for approximately \$980,000. Also of Strauss design, this bridge had two leaves of 110 feet, thus providing a 220-foot clear opening. The engineering study included in the 1924 Annual Report of the Los Angeles Harbor Department claimed that the bridge was the heaviest and largest structure of its kind ever built. Motor rooms were constructed on either side of the channel, and each contained two 67horsepower electric motors to power the individual leaves. Each motor was connected to a long shaft with a differential gear, and this in turn with a pinion on each end. The pinion was connected to the rack of the bridge. The 2,380-ton bridge was constructed with the aid of counterbalance weights. The essential contribution of the small motors was to initiate the action and to contribute minimal power as the bridge went up. The bridge leaves locked together in the center by means of lock motors and hooks, lining the bridge up perfectly for the railroads. All controls were separate so that the leaves could operate like two separate bridges. For safety, however, both sides have always been raised together because they provide a barricade against traffic attempting to come onto the bridge.

The Badger Avenue Bridge now carries cars of the Union Pacific Railway and the Harbor Belt Line on its two railroad tracks and also accommodates a highway and a walkway. It takes about 4 minutes to raise and lower the bridge; as many as 50 openings have been logged during an 8-hour shift.

In 1947 general subsidence in the area dropped the bridge nearly 8 feet, causing the metal portions of the bridge to bind when the temperature exceeded 72 degrees, and the metal framework expanded. In 1951 the Eichleay Corporation of Santa Clara jacked the bridge up 7 feet at a cost of close to half a million dollars. By 1957 the bridge had sunk some 7 feet again, binding had occurred and the bridge had to be raised. Before the subsidence hot weather had not hampered

bridge operations. The bridge is presently in excellent operating condition and accommodates land and water traffic on weekdays. During the weekends the bridge remains raised.

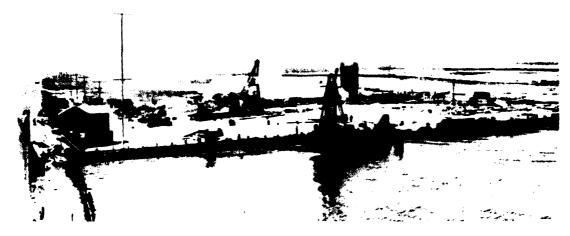
The fact that this bridge carries the only railway lines to Terminal Island is one explanation for its still being in use. Mr. Harold Menzel who has operated the bridge for the past 18 years claims that it is the only double-leaf bascule still in operation in the United States. One single-leaf bascule is in use in Victoria, British Columbia, and a few others are in use in the New Orleans area. The latter, however, are worn out and poorly maintained.

The rarity of the Badger Avenue Bascule Bridge is attested to by the fact that it is the only one that motion picture producers use and they use it frequently. Because the Commodore Heim Bridge adjacent to it carries a large part of the road traffic and connects with the Terminal Island Freeway, the Harbor Department may one day consider replacing the bascule bridge with a causeway or some other mode of crossing for the railroads. If this should come about, dismantling of the bridge should not be taken lightly. The brief history included here demonstrates that the zenith of bascule bridge building is past and that most, like the Strauss, have been destroyed. The significance of design to historic bridge architecture suggests that further research should be undertaken to determine the real value of this bridge and its potential. In the interim, it should be registered as a National Landmark and protected in every way from alteration or removal.

23. Southern California Edison Company Complex on Terminal Island

The Southern California Edison Company Long Beach steam power plant complex is located on a 43-acre tract adjacent to the Salt Lake (Union Pacific) Railroad at the east end of Terminal Island, 2665 West Seaside Boulevard.

Edison brought the first large industry to Long Beach Harbor when it commenced construction in September 1910. Ford Motor Company purchased land for its assembly plant on Badger Avenue in 1926, and Procter



Edison Plant No. 1 required thousands of pilings sunk for a foundation before work on the smokestack and intake could begin. (1910)

Southern California Edison Company

and Gamble acquired their site in 1929. The next large plant, Spencer Kellogg and Sons, vegetable oil refiners, did not come to Terminal Island until 1937. Thus, the Edison plant was the only large structure on the landscape for 15 to 20 years.

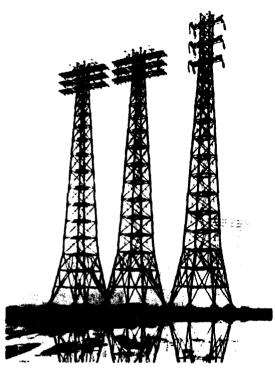
Because of the large increase in system demand in 1910, the Southern California Edison Company purchased a large plot of land in Long Beach Harbor upon which to construct an oil-fired steam electric generating station. This was the first large nonmarine industry to locate in the then developing Long Beach Harbor. Construction commenced in August 1910. The sand fill was consolidated by pounding thousands of creosoted piles into the marshy soil. At the same time, construction began on the first concrete smokestack. By May 1911, construction of the first plant was well advanced, and a transformer house, turbine house, and boiler house were already completed.

Unit No. 1, a 12-megawatt (MW) vertical steam turbine, went into service late in 1912; Unit No. 2, a 15-MW vertical turbine, went into service in 1913; and Unit No. 3, a 20-MW unit and the last planned in the original construction, went into service in 1914.

As part of the original construction, in 1912, two 250-foot-high lattice steel towers were constructed on either side of the Cerritos Channel to carry the 66,000-volt high tension lines from the plant to feed into the Edison system. Built high to clear the masts of sailing ships, they were the tallest steel towers in use in the electric industry during that era, and they remain in use today.

This original structure, later called Plant No. 1, was the first modern high-pressure steam-turbine-operated electric generating station in southern California. The station, which served a number of harbor-area industries including the famous Craig Shipbuilding Works across the channel, was the major generating resource on the Edison system until 1917.

In 1917, the Edison Company purchased Henry E. Huntington's Pacific Light and Power Corporation, inheriting that company's responsibility to provide the energy to operate the local and interurban electric railway systems in southern California. This tremendous energy demand, augmented by the great increase in population in southern California in the post World War I era, taxed the resources of the Edison system and led to the



High tension towers across the Cerritos Channel. Original 1912 towers to left, 1924 tower at right.

Southern California Edison Company

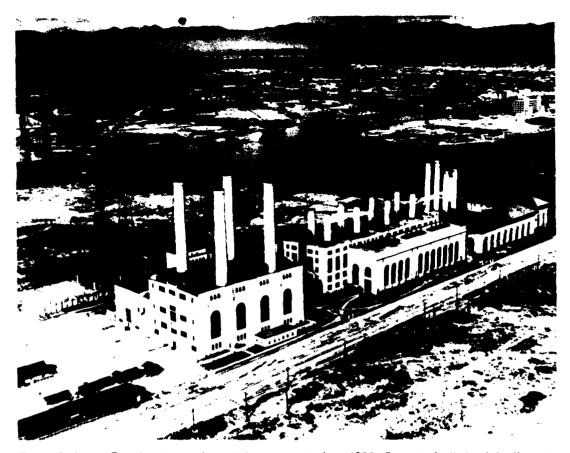
construction of a large number of hydroelectric generating stations in the Sierra Nevada Mountains.

Unfortunately, the winter of 1923-24 brought no rain to California, and in fact, was the driest winter in State history; no rain fell anywhere for 18 months. At that time, Edison, in common with the other major utilities in the State, derived most of its electric generation from water power plants, and the prolonged drought severely reduced the utilities' ability to meet the demand for electricity. To alleviate the power shortage, Edison began constructing a new plant, to be known as Plant No. 2, on the Long Beach site. This facility, planned and constructed in just under 10 months, holds the world's record for the fastest construction of a modern high-pressure steam-electric generating station.

Late in the 1920's, the still rapidly increasing business of the Edison Company prompted construction of yet another plant, Plant No. 3, at Long Beach. This facility. construction of which began in 1927, is the only plant in the complex surviving today in its original form. Plant No. 3 was planned to be the largest generating station in the world, incorporating a series of 100-MW horizontal turbines of the most modern high-pressure high-superheat design. Seven units were planned, but only the first two units were installed because of the decrease in business caused by the depression. In fact, the existing west wall of Plant No. 3, where the anticipated extension was never completed, is still covered with temporary steel plating instead of concrete.

Due to the extraction of oil from under the harbor area, land subsidence commenced in 1944 and lasted into the early 1950's. The worst sinking occurred at the east end of Terminal Island, where, under the steam plant, the island sank 33 feet. Although the subsidence was potentially destructive to the finely balanced turbines in the generating station, no problem was encountered, and the plant continued to generate electricity throughout the period of subsidence. Each building in the complex sank independently, but few cracks were noted. At no time was the plant shut down for subsidence repair, although tremendous dikes had to be built around the end of the island along Cerritos Channel, and the intake and outfall piping had to be replaced.

Due to its early history of providing electricity to operate street railways, Edison and its predecessor companies developed in the 1890's as the only large 50-cycle alternating current electric system in the United States. By the end of World War II this incompatibility with the rest of the nation forced Edison to undertake an extensive frequency change project. Three years and \$47 million were spent converting every piece of rotating machinery and all customer motors and equipment in the Edison system, including all the generators in Plants No. 2 and No. 3 at Long Beach, from 50cycle operation to the national standard of 60 cycles. Plant No. 1, which was already obsolete, was razed. In addition, two new units



Edison's Long Beach steam plant at its greatest size, 1939. Forest of oil derricks line the horizon.

Southern California Edison Company

(7R and 8R) were installed in Plant No. 2 to replace original units 7 and 8 appropriated by the Treasury Department during the war and sent to Russia to assist in their war effort.

In the early 1970's, Plant No. 2 was thoroughly rebuilt to incorporate new combined-cycle technology, including the use of gas turbines and waste heat recovery boilers to augment the original turbo-generators in the plant. Last operated for system load in July 1973, Plant No. 3, retained by Edison as a 48-hour cold standby plant, is the oldest steam generating station retained for service anywhere in California.

The more than 50-year history of this power plant complex incorporates all of the steam-electric generating technology that the utility industry has employed during that period of time. For this reason, it is recommended that the Southern California Edison Company Long Beach Steam Plant be placed on the National Register of Historic Places.

24. Hughes Flying Boat H-K 1 and Drydock-Hangar

These resources are located on the east side of Pier E between Berths 120 and 121 at the Long Beach Harbor. According to Rear Admiral Carl Seiberlich, who inspected the H-K

1 on November 19, 1976, the plane is in remarkable condition and as good as the day that Howard Hughes flew it, November 2, 1947. After that flight the plane was taxied to the drydock and a hangar was built over it. In the 1950's the hangar flooded and the present structure replaced it.

The H-K 1 was the largest airplane ever to have flown in 1947. The specifications were:

Wing span Wing root chord Wing tip chord Maximum wing thickness Wing area Length overall Height overall Hull width Hull height

Tail span Horizontal stabilizer area

Fin chord Fin area Gross weight Pay load **Fuel capacity**

Power

High speed (estimated) Cruising speed (estimated) Landing speed (estimated) Range

Engines (8)

Propellers

320 feet

51 feet, 9-3/4 inches 19 feet, 7-3/4 inches 11 feet, 6 inches 11,430 square feet 218 feet, 6-1/4 inches 79 feet, 3-3/8 inches

25 feet 30 feet 113 feet

2,610 square feet

53 feet

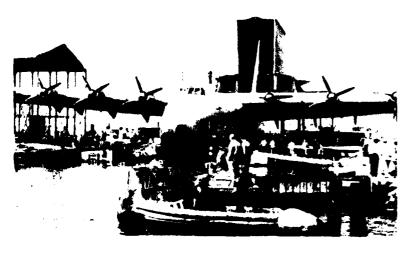
1,699 square feet 300,000 pounds 130,000 pounds 14,000 gallons 24,000 horsepower 218 miles per hour 175 miles per hour 78 miles per hour 3.500 miles

Pratt & Whitney R-4360

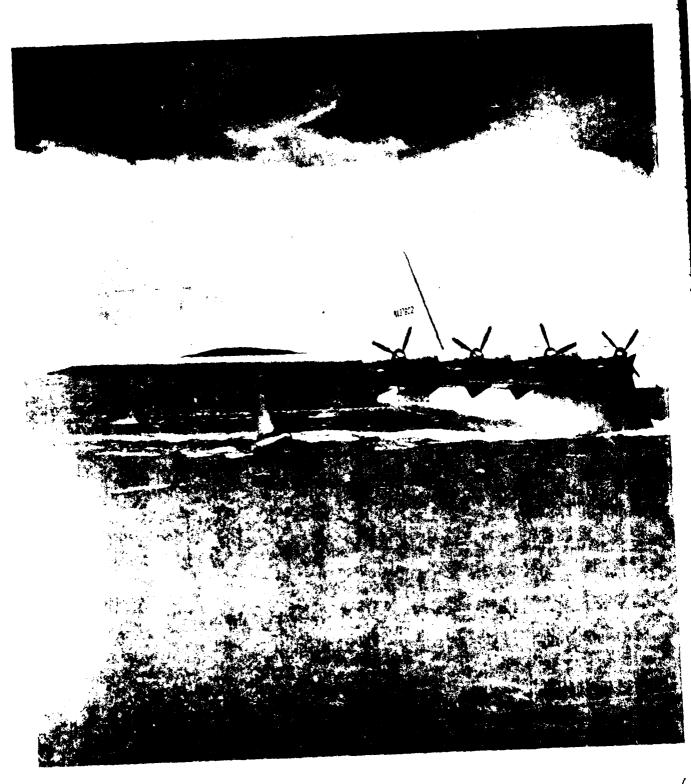
2800 cylinder. 3,000 horsepower

17-foot, 2-inch diameter

The four inboard propellers are reversible.



The H-K Flying Boat afloat and ready for tests.



1. 43

1

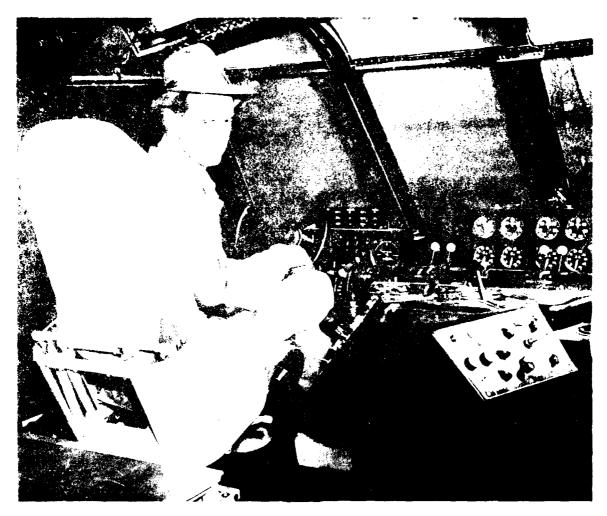


1

The H-K Flying Boat seconds before takeoff.

North in University Library





Hughes at controls.

Fitted as a hospital ship it would carry 350 litter patients and medical crew (Hatfield, p.5)

The H-K 1 was the outgrowth of a contract between the War Production Board and the Kaiser-Hughes Corporation issued on November 16, 1942. The contract, which was for three massive troop transport flying boats to be built of wood, was negotiated during World War II at a time when enemy submarines were sinking U.S. ships that were taking men and cargo to the battle areas. By 1944, the United States was winning the war and had

minimized the Nazi U-Boat threat. Kaiser resigned from the corporation and Hughes completed the pilot model at his own expense. Costs of production were unprecedented. The wooden building at the Hughes factory where the parts were assembled was so large that it covered 8 acres. The plane's wings were 11 feet, 6 inches thick and made entirely of wood except for the motor mounts and fittings. The bonded plywood covering the hull and the birch formers and stringers within it are good examples of the unique design, and perfect work manship displayed throughout the construction.

A site at Terminal Island was carefully prepared for assembly of the huge craft so that the hull could be placed below sea level and the wings then attached. Moving the huge assemblies from Culver City to Terminal Island was of such historic importance that schools along the route of travel brought the children out to see the sections of the plane pass by. Power and telephone lines along the way had to be cut and respliced by workmen who rode on top of the wings and other high assemblages. A specially built pontoon bridge provided the last segment of the route over to Terminal Island. There, on the site especially prepared for assembly, the parts were laid out. The 92-foot-high fin was impressive, and all final assembly took place out in the open. Once assembled, the dirt in front of the drydock was removed, water rushed in, and the plane was afloat. Only taxi and flight tests remained. Meanwhile Hughes had other problems.

The Hughes Tool Company was awarded close to \$60 million in warplane contracts, and in the summer of 1947 Senator Samuel Brewster, Chairman of the Senate Investigating Committee, attempted to discredit the then Democratic administration claiming that persons close to the administration had taken bribes from the Hughes Tool Company. After 5 days of testimony Howard Hughes abruptly left his California office, walked out to his plane, and flew to Washington. There he impressed the Committee and audience with his intellect. independence, and honesty. He placed Brewster on the defensive when he revealed that Brewster had come to Hollywood and said that the hearing would be called off if Hughes, who then owned Trans World Airlines (TWA). would agree to a merger of TWA and Pan American Airways so as to form an airline similar to Air France or Lufthansa. Towards the close of the hearings, Brewster charged that the H-K 1 lumberyard would never fly. Hughes replied that he would leave the country if it did not and further disclosed that he had spent \$7,200,000 of his own money on it. Hughes-for-President Clubs sprang up around the country while Brewster lost his bid for reelection to the Senate.

On November 2, 1947, the Flying Boat left its moorings and Howard Hughes gave it long taxi tests. A recorded radio broadcast made aboard the plane during the historic test discloses that James McNamara asked, "Howard, what speed would you have to attain to be airborne?" Hughes replied, "The ship could be easily airborne at 90 miles an hour, but as I say, I don't intend to do that for several months because so much equipment is here that I want to check out very carefully before I have the airplane in the air." Less than 10 minutes later he lifted the ship and the unchecked equipment into the air. Hughes later said, when asked, that Brewster's charge had no influence upon his decision to fly. He flew for a distance of about 1 mile and the plane reached an altitude of 85 feet even with its load of 2,000 gallons of gasoline. It was assumed that the plane was completely airworthy.

Since that flight the plane has been lodged in an atmosphere-controlled, form-fitted complex of corrugated steel structures without hangar doors. After the war, the plane became the property of the Reconstruction Finance Corporation, and after its dissolution in 1957, the property of the General Services Administration.

Since 1961 the Hughes Tool Company (now SUMMA Corporation) has leased the plane from the Government for \$800 a month and maintained it at SUMMA expense at Pier E in the Long Beach Harbor. Rentfor the 7.2-acre site rose from \$24,000 a year to \$36,000 a year in 1966 and to \$100,000 a year in 1972. Long Beach notified SUMMA in 1972 that it needed the space to make way for a deepwater tanker terminal.

In 1975 an agreement was drawn up between SUMMA and the Smithsonian Institute whereby the flying boat would be dismantled and eight aviation museums nationwide would get a part of it. Appeals from the Save Aviation History Association, the National Inventors Foundation, the Institution of Human Engineering Sciences, the Los Angeles City Council, petitions, and letters from private citizens saved the famous aircraft from destruction. When the Navy inspected the plane in November 1976, it looked as if the Navy was interested in flying it. However, these

negotations have come to an end, and SUMMA may renegotiate with museums or come to some other decisions.

Structures associated with the lives of persons significant in our past are regarded as historical resources. "The Spruce Goose," the only Hughes-designed plane we have today with the exception of the H-1 at the Smithsonian Institute, was the greatest engineering challenge he dealt with. Hughes was a man who had no formal engineering training, yet emerged a superb engineer. He respected engineers and listened to them, but the decisions were always his.

His genius was apparent in 1930 when he produced "Hell's Angels" and introduced to the industry an entirely new use of aviation in filming. Two years later he was flying a P-12 Boeing fighter plane as his private plane, and in 1936 he broke a speed record from Burbank, California, to New York. In 1937 he designed his own racer, the H-1, and broke the record he had set the year before. The following year he flew around the world in 3 days, 19 hours, and 14 minutes and set another record. Hughes continued to design, build, and test his own high-speed planes. His XF-11 photo reconnaissance aircraft, with many innovations including a pressurized cockpit and contra-rotating props, crashed when Hughes was testing it and one of the propellers accidentally reversed. He was nearly killed in this, his fourth crash; still, the next year he completed and piloted the Flying Boat. All of his other originally designed planes have been destroyed.

Although the Flying Boat may be moved in the future, as may the SS Catalina — the nationally registered historical resource docked in the Los Angeles Harbor, the Flying Boat should receive proper recognition at this time. The importance of this plane and its designer to aviation history, as demonstrated by the struggle to save the H-K 1 in 1975, is sufficient reason to nominate it for the National Register of Historic Places even though its contribution lies within the last 50 years. The site where it has been lodged for 30 years should also be marked. The drydock hangar site should be registered as a California State Historical Landmark.

25. Craig Shipbuilding Company, Long Beach

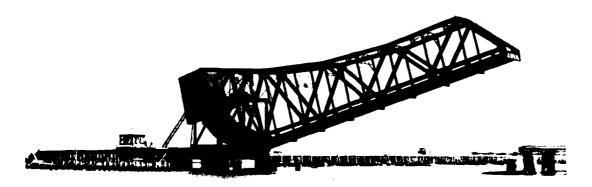
This site is located at 1601 Water Street on the southeast side of Channel 3 extending southwest from marked Slip 4 to the Signal Oil and Gas Company yards.

Between 1880 and 1900 the United States became an advanced industrialized nation capable of trading its excess manufactured goods and building its own capital goods (e.g., steel ships). On February 27, 1907, John F. Craig signed a contract with the Los Angeles Dock and Terminal Company securing for his Toledo, Ohio, steel shipbuilding firm 43 acres of the Long Beach inner harbor on a then meandering stream. The acreage on a presentday map is between Channel No. 3 and Water Street. Craig was a second-generation shipbuilder, his father having begun the shipbuilding business in Trenton, Michigan. The elder Craig later moved to Toledo, Ohio, where he spent 18 years building ships of up to 550 feet. Seeking a larger water frontage, a longer building season, and a healthier climate, Craig visited San Diego and other California coastal cities. He decided upon Long Beach Harbor, citing the energetic up-to-date men of affairs who would make it grow to be famous (ref. 1).

Craig brought to Long Beach the first steel shipbuilding plant south of San Francisco. Reflecting the entrepreneurship of the age, he put his 26 foremen and their families aboard a train headed west, spent \$250,000 of his own money on machinery during the first year, and put up brick and concrete machine shops. When building commenced, a foundry was lit up every Thursday night so that sheets of steel could be rolled for use during the coming week (ref. 2).

On November 15, 1908, a Los Angeles newspaper read:

The launching yesterday afternoon of an \$85,000 electric dredger from the dry docks of the Craig Shipbuilding Company into the Long Beach inner harbor was a most spectacular sight, and an event of moment in the industrial



A permanent Salt Lake Railway trestle connecting Long Beach to Rattlesnake Island blocked access to the Long Beach Inner Harbor and blocked Craig Shipyard access to the outer harbor. The railroad built a 180-foot bascule bridge in 1908 to replace the obstructive trestle.

U.S. Army Corps of Engineers, Los Angeles District

development of Southern California. It was the initial product of a manufacturing plant that promises to give fame to the entire Pacific Coast...

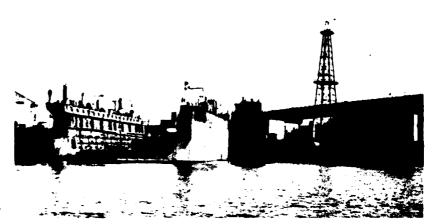
Hundreds of people witnessed the lightning-like descent of the boat, and when it struck the water there was a burst of deafening applause which lasted for several minutes and resounded through the valley from Point Fermin to Signal Hill (ref. 3).

Common to Great Lakes practices, the ship was constructed on a level building berth 10 to 15 feet under water; thus all measurements could be plumbed. Launching was consequently sideways and unique to the coastal viewer. The new dredger, built for the Western Marine and Construction Company. was used to excavate the three channels of the Long Beach Harbor. Built for harbor work, Craig's first ship "built entirely of steel and as strong and durable as a war vessel" (ref. 4) operated under a contract with the Los Angeles Dock and Terminal Company. Western Marine used the new dredger and one other craft to remove 5 million cubic yards of dirt, thereby deepening channels and creating 6 miles of water frontage. The second launching was also of a dredger and thus Craig Shipbuilding became a part of the pioneer team that created

one of the largest manmade harbors in the world (ref. 5).

Craig Shipbuilding's first year of work was slowed by a span of the Salt Lake Railroad (from mainland to Terminal Island) that blocked the ocean entrance to its wharf. Finally, Long Beach citizens filed a formal protest with Captain Amos A. Fries, U.S. Army Corps of Engineers, to force completion of a drawbridge that would allow the shipyard to operate without more delays. A rise in the number of applications for inner harbor use occurred after the signing of the Craig contract in 1907, and a second surge of interest followed the first launching (ref. 6). On January 17, 1911, Craig's recently launched General Hubbard, 256 feet long and 42 feet wide and the first steel steamship built on the southern California coast, passed through the newly dredged ocean entrance of the Long Beach Harbor, the first ship to do so (ref. 7).

Craig built the first floating drydock south of San Francisco in 1912, and it is still in use at this writing. A tank tower high enough to be cited as a landmark for entrance to the Long Beach Harbor on U.S. Geodetic Survey maps of the period was constructed in 1917 (ref. 8). Because of continuous investment in his plant and good management by his sons, the Craig Shipyard is the oldest active drydock on the Pacific coast. The Craigs sold it in 1968 to the California Shipbuilding and Dry Dock Company.



Craig Shipyard drydock.

The Site in 1977: Severe subsidence forced Craig Shipbuilding to remove most of the original buildings. A two-story office building at the Water Street entrance, the oldest original building on the premises, was moved onto the vard from an unknown site in Long Beach in 1908. The building's design and construction are typical of the turn of the century. The old machine shop still stands as does the high water tower built in 1917. The floating drydock finished in 1912 lies directly before the Water Street entrance. Destined to be towed up the channel to make way for a new concrete dock in the coming year, this drydock is by far the most picturesque of the remaining structures. Its design and its history make it a useful resource. A more practical choice for a plaque is the old office building. This site should be considered for a California State Historical Landmark. Because a thorough investigation of all the old yards was not possible during this study, an early search should be conducted at the other shipyards to determine if there are any cultural resources extant.



Craig Shipyard office.

26. Looff Carousel

The Looff Carousel, currently in the Long Beach Pike amusement park, may be the oldest ride in California. In addition, it is a fine example of the craftsmanship that has made its creator, Charles Looff, and his carousels famous

Charles Looff and his family migrated to California in 1910 and took up residence in a cupola-crested building on the grounds of the Long Beach Pike. During the following year, Looff reconstructed his carousel, placing it on the first floor of the building then inhabited by his family. This carousel was equipped with a high-quality, German-made organ purchased in 1906 and shipped to Long Beach when the family moved. Shortly thereafter, Looff opened another workshop in the downtown Long Beach area. Unlike his New York shop, however, this shop produced only 10 carousels.

In 1876 Charles Looff began to operate the first carousel ever established at Coney Island in New York. He had carved its horses himself and personally constructed the rest of the carousel. With the success of this initial effort, Looff established a workshop in New York City, employed several woodcarvers, and turned out over 100 carousels between 1876 and 1910. Among the carousels constructed in New York was the one originally located in Long Beach.

From 1911 to 1943, the Looff family owned and operated the carousel and the amusement park that surrounded it. When Charles Looff died in 1918, his son Arthur assumed management of the park. It was then sold to the Long Beach Amusement Park Company.

In 1932 the carousel was moved to a point east of its original location on the first floor of the cupola building, which is still identified by the neon letters LOOFF's stretching across its top. Eleven years later, on July 14, 1943, the carousel was destroyed in a fire. It was, however, immediately rebuilt. The horses were replaced with others Looff had carved in his Long Beach shop, and the organ was replaced with a duplicate purchased at the same time as the original and stored since 1911. Thus, most of the carousel's parts are Looff originals although the carousel is in poor repair today.



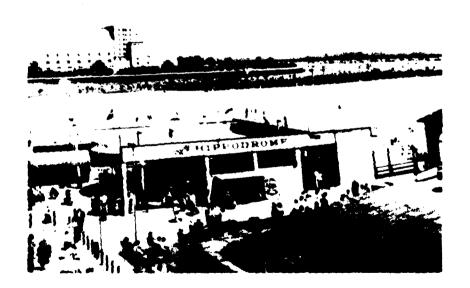
THE HAND-CARVED WOODEN HORSES ON THIS CARROUSEL ARE PERFECT IN EVERY DETAIL EVEN TO THE SHOE NAILS. ONE OF THE FEW REMAINS IN THE UNITED STATES. THIS MACHINE FOLLOWS THE TRADITION ESTABLISHED CENTURIES AGO UNITED THE TRADITION ESTABLISHED CENTURIES. PERSIA WHEN CARROUSELS WERE USED AS COM BAT TRAINING DEVICES FOR YOUNG NOW IMPAR. THIS EXPLAINS THE ELEGANT JEWELLE PINGS AND THE SPIRITED ATTITUDE OF A ALS. THE GOLD RING WAS USED AS A F FOR THE YOUNG WARRIORS LANCE A PUSHED AROUND BY SLAVES ADOPTED THIS TRAINING METH TO ROTATE THE DEVICE. LATER! MEKRY WERE ROTATED BY MEN. ANIMALS, GALLER LA AND NOW ELECTRICITY. THE MUSIC IS FIRE. BY ONE OF TWO REMAINING AUTHENTIC ASKARPERS HIPPODROMES, ALL WORN OUT PARTS MU MADE BY HAND. OVER SIXTY YEARS OLD THIS IS TRULY A RARE ANTIQUE.

The carousel manufacturing business died during the depression of the 1930's. As the industry died, so did the art of horse carving of which Looff was a master. Among collectors and those craftsmen who restore carousel horses, Looff creations are greatly admired for their grace, beauty, and superior workmanship. The carousel is the oldest remaining ride on the Pike, and both the carousel and the Looff home should be given further study in relation to the era when Long Beach was primarily a well-known resort. Marking should be at the State level.

Looff Carousel.







27. Old Whaling Station at Portuguese Bend

Portuguese Bend in the Palos Verdes Estates is about 2-1/2 miles east of Point San Vicente. The site is peripheral to the Los Angeles Harbor. It is registered as California State Historical Landmark No. 381; a copy of the application for registration is included in the appendix.

28. Drum Barracks: Officers' Quarters and Powder Magazine

Drum Barracks in Wilmington is the only Civil War landmark in California. From 1862 to 1866 the original complex of more than 20 buildings was the focal point for men and materials destined for all parts of the Southwest. Today only two structures remain. One of originally three officers' quarters stands at 1053 Cary Avenue and is known simply as "Drum Barracks." The powder magazine stands on its original location not far from the remaining officers' quarters, but it has for many years been enclosed within a wood-frame house that hides it from public view. The house is on the corner of Opp Street and Eubank Avenue.

Camp Drum initially served as the base for the California volunteers. After the volunteer "California Column" left for Arizona and New Mexico to hold these territories for the Union, the post became the rendezvous for recruits destined for Arizona and a depot from which supplies were sent throughout the Southwest. One of the first telegraph lines in this part of the country linked Drum Barracks with other Federal fortifications. The post also served as a base of operations against Indians in the Southwest. During 1862 and 1863 the famous Army Camel Corps carried freight between Fort Tejon, Los Angeles, and Drum Barracks.

Less colorful, perhaps, but far more significant, the presence of Federal troops at Drum Barracks served as a warning to the strong secessionist sympathy in southern California that might otherwise have menaced the Union cause. During the war the number of soldiers stationed at Camp Drum, named for Adjutant-General Richard Coulter Drum, head of the Department of the West, varied from 2,000 to 7,000. Among the notable officers who

served here were Generals Philip Henry Sheridan (who later remarked, "The only good Indians I ever saw were dead"), Winfield Scott Hancock, George Stoneman, and Phineas Banning, and Colonel Cave J. Couts.

In May of 1859, 2 years before Civil War hostilities erupted, Lieutenant Winfield Scott Hancock came from Fort Tejon to Los Angeles to acquire land upon which to construct a post for the Army Quartermaster's Department of the Southwest. For a consideration of \$1.00. Phineas Banning and Benjamin David Wilson donated 60 acres of land. Banning's generosity was more than repaid, because the Government awarded him all the construction contracts for the fort and even paid him to build a flume to bring water from the San Gabriel River 8 miles distant. Construction of the post lasted from 1860 until 1862; the officers' quarters buildings were the last to be completed. The headquarters site, which covered about 30 acres, included the quarters of the commanding officer, two additional officers quarters, an adjutant's office, five soldiers' barracks, bakery, granary, hay barn, blacksmith and wheelright shops, two corrals, hospital, four laundry buildings, guard house, and powder magazine. Depot buildings for commissary and quartermaster stores occupied about 7 acres near Banning's landing at Wilmington.

With the triumph of Union forces, Drum Barracks, which had contributed much to the economic and social life of the region, was no longer necessary to Army operations. The decision to abandon the post in the spring of 1866 proved a severe economic setback for the town of Wilmington, whose importance and prosperity were dependent upon the military presence. The more than a score of buildings were sold at auction in 1873 for less than \$10,000. Wilson and Banning each acquired one of the officers' quarters in addition to several other structures. Some were removed and others were destroyed by fire. Banning razed several buildings to salvage their materials and moved others to a location near his docks. Fortunately, the powder magazine was not demolished and the officers' quarters that stands today on Cary Street was carefully preserved. About 10 acres of former Drum

Barracks land were donated by Wilson to the Methodist Episcopal Church to establish a college. Hardship caused by drought and flood forced the church to cancel its educational plans, and the property was sold for \$800.

During the Army's presence at Fort Drum, the large two-story colonial-style officers' quarters presented an attractive and dignified appearance. The front section of the 16-room wood-framed structure was large and rectangular, with two rear wings extending parallel with the sides of the building. Inside were a high-ceilinged central hall, a stairway with polished mahogany balustrade, four marble fireplaces with U.S. eagles on the mantels and andirons, and chandeliers in many of the downstairs rooms. An entrance-way porch and second-story balcony stood at the front and rear of the building and numerous multipaned windows were flanked by exterior wooden shutters. Roof shingles were originally of split cyprus. Amazingly, this handsome wellbuilt edifice was one of the first prefabricated structures ever assembled on the Pacific Coast. All its lumber, hardware, marble, and bricks were shipped around Cape Horn from the Portsmouth Navy Yard in New Hampshire.

In the 20th century, Thomas Keaveney preserved the officers' quarters by converting the structure into a charming residence. The Native Daughters of the Golden West placed a plaque commemorating the Drum Barracks in 1927, and it subsequently became State Historical Landmark No. 169. The Los Angeles Cultural Heritage Board designated Drum Barracks as Historic-Cultural Monument No. 21 in 1963. Two years later the site was recorded by the American Institute of Architects' Historic American Building Survey in the Library of Congress, and in 1971 the site was placed on the National Register of Historic Places.

Notwithstanding widespread recognition as a historical monument of major significance, Drum Barracks officers' quarters was marked for demolition in February 1965. Protest by the Cultural Heritage Board gained time for the Society for the Preservation of Drum Barracks to organize and raise money to purchase the building. In 1968 the society sold the officers' quarters to the Los Angeles Department of

Parks and Recreation for \$30,000. Later that year the Department relinquished the property to the State and was reimbursed the \$30,000 purchase price. The State allocated \$95,000 to acquire the adjacent property, restore the officers' quarters, and develop the site as a State Historical Park Civil War Museum. Unfortunately, only about \$20,000 of the allocated \$95,000 has been spent during the last decade; the adjacent house lots have not been purchased, and prospects of a parkmuseum seem remote and discouraging.

Leaking water pipes severely undermined the brick foundation and cracked the interior plaster. The bricks from the foundation, fireplaces, and chimneys have been removed and neatly stacked outside, but there are no plans to incorporate them into the eventual restoration. Future plans call for dummy fireplaces and chimneys. A new foundation has been constructed, and the interior plaster has been replaced with drywall. Large timber supports are now securely bolted within the old walls, but this new structural solidity is not apparent to the casual observer. Most of the windows are either broken or boarded up with plywood, though there is enough of the original glass to fill the panes of the most conspicuous and important windows. The rear porch and balcony have either fallen off or been dismantled.

The existence of Drum Barracks powder magazine is not widely known because it has long become incorporated into the structure of a residential dwelling. In recent years this house has been rented to a Spanish-speaking family or families, most of whose members do not communicate in English. Very few historically minded individuals have actually seen the powder magazine. The wood-frame house that conceals it from public view appears to have been constructed in the 1920's or before. Because the powder magazine's stone and brick walls were about 3 feet thick and have been protected from the elements since the construction of the surrounding house, the structure is in excellent condition and in no danger of collapsing.

Many years ago, according to Vincent Manchester, resident caretaker of the officers' quarters, the stone blocks that encased the

interior of the powder magazine were removed. A woman who supposedly lived in the house next door on Eubank Avenue told Manchester that the blocks were taken out to make room for refrigeration and meat storage. The old stone blocks were piled in the front yard near the street, where the woman remembers playing on them as a child until they were eventually removed. According to Manchester, the State Legislature once allocated \$18,000 to acquire the property but the money was never spent.

Considering the historical significance of Drum Barracks officers' quarters and powder magazine as the sole surviving landmarks commemorating California's participation in the Civil War, they should be carefully preserved. The primary danger to the officers' quarters is from vandals or arsonists; an interior sprinkling system should be installed as soon as possible. The powder magazine is obviously fireproof, but it too faces the danger of destruction. Its sturdy walls are insufficient protection against the bulldozer of the property owner or developer who may wish to convert the historic site to more lucrative use. Fortunately, the chance of this occurring in the immediate future appears small. Nearby oil wells, commercial and industrial businesses. and the generally low-income housing of the neighborhood indicate that "progress" is unlikely for the moment. The house of which the powder magazine is now a part presents a dilapidated exterior appearance; inside, however, it is surprisingly pleasant, with unusually high ceilings which were built to conform to the height of the powder magazine.

The property upon which the powder magazine stands should not be allowed to remain indefinitely in the possession of an owner who has made no formal and legally binding commitment to preserve the historical landmark subtly hidden within the premises. Preservationists may decide to acquire the property with the intention of removing the surrounding house to make the powder magazine more visible. Others may wish to relocate the powder magazine at the rear of the nearby officers' quarters. The latter course may entail considerable technical problems and expense, not to mention strong sentiment among many preservationists that historical

buildings should never be removed from their original site unless no alternative is available for their preservation. Whatever course is taken, it would be both senseless and unfair to the present occupants to demolish their modest wood-frame home until the officers' quarters have been fully restored and converted into a Civil War Museum. Even then, consideration should be given to facilitating the family's removal to comparable accommodations.

29. General Phineas Banning Residence

One of the most attractive landmarks in southern California and certainly the most historically significant cultural resource in the harbor area is the former home of Phineas Banning. The stately white Greek Revival style mansion, officially known as the General Phineas Banning Residence Museum, is located at 401 East "M" Street in the middle of 20-acre Banning Park in Wilmington. The town of Banning which bears his name was one of the main stops along his stage and freight lines that extended throughout the Southwest. Banning High School is also named in his honor, as is Banning Boulevard which runs on a north-south axis bisected by Banning Park.

Banning was penniless and only 21 when he arrived in San Pedro aboard a clipper ship in 1851. He rented a boat on credit and rowed to ships at anchor to which he sold water for \$1.00 a keg. Don David Alexander, the first businessman of San Pedro, recognized the young man's talents and gave him regular work. Banning tried his hand at stagecoach driving, and before long he became the region's recognized "transportation king" whose enterprises included not only a stage line to Los Angeles and a freight line with mule teams to Salt Lake, Mojave, and Yuma, but a fleet of oceangoing vessels and a railroad from Wilmington to Los Angeles.

From 1851 until 1858 Banning's headquarters were in San Pedro. In 1857, together with Benjamin David Wilson and John G. Downey, Banning purchased 2,400 acres of land from Manuel Dominguez. A heavy spring storm in 1858 damaged Banning's wharf at San Pedro, wrecked several barges and his yacht, and washed away a large store of lumber

stacked on the beach. The following year, to avoid a similar disaster, Banning combined his share of the former Dominguez land with Wilson's to form the nucleus of the town of New San Pedro, which the State Legislature in 1863 renamed Wilmington after Banning's birthplace in Delaware. "Banning's Hog-Waller," as the infant port was derisively known, was about 4 miles northeast of San Pedro at the head of the slough, surrounded by mudflats. Mud scows were used to dig a channel up the estuary, hand pumps siphoned water from the marshy land, and before long there were warehouses and a lumber yard.

In the years prior to the Civil War, Banning's wharves at old and New San Pedro handled large quantities of products ranging from hides, tallow, lumber, and wire to grapes, abalone shells, and oil from whales and sharks. The new port's advantages of being several miles closer to Los Angeles and well protected from storms were somewhat offset by the shallow depth of the water. Oceangoing vessels could not enter the inner harbor, so Banning built shallow-draft lighters, which could easily carry cargo over the sand bar and up the estuary. Banning also constructed his own fleet of oceangoing steamships.

When the U.S. Army decided to locate a post for its Quartermaster's Department of the Southwest in the Los Angeles area, Banning and Wilson donated a 60-acre site for \$1.00. An outspoken champion of the Union cause, Banning secured all the construction contracts for Drum Barracks. He was known as General Banning because of his service as a brigadier general in the state military during this period. For many years Banning also served as a volunteer policeman. As early as 1861 Banning had been responsible for bringing the first telegraph to the harbor area. Later, in 1864, he established the community's first post office, and in the same year he also started the first newspaper, The Wilmington Journal.

The presence at Drum Barracks of several thousand troops, many of whom brought their families, greatly stimulated the growth of Wilmington's prosperity and social life. Six public schools were necessary in 1865 to accommodate the expanded population. Hard times followed the Army's decision to abandon

the post in 1866, but Banning's foresight and sound personal finances prevented the catastrophe from permanently stunting Wilmington's growth.

Banning became a State senator in 1865 to bring attention to Wilmington, but his lobbying on behalf of harbor development met with little success either in the State capital or in Washington, D.C., where he made several trips to solicit Federal funds. He did, however, introduce the first railroad bill into the California State Legislature. Banning's support of a Los Angeles bond issue resulted in construction of the 21-mile Los Angeles and San Pedro Railroad in 1868 and 1869, the first railroad in southern California. Subsequently, Banning's efforts were largely directed toward bringing the Southern Pacific Railroad to Los Angeles in 1876.

Banning's first wife, Rebecca Sanford, whom he had married in 1854, bore him eight children, only four of whom survived to adulthood; she herself died suddenly in 1868 at the age of only 31. Two years later he married Mary Hollister, his wife for the final 15 years of his life. Banning's own death came in 1885 from injuries suffered in a freak accident in San Francisco when he fell off a moving street car. He was only 55. Only recently he had succeeded in getting the U.S. Congress to authorize plans for a breakwater from Rattlesnake (now Terminal) Island to Deadman's Island and to build Point Fermin Lighthouse. Without the breakwater there could be no port of entry for oceangoing vessels. Although he died before his dream materialized, Phineas Banning is appropriately remembered as the "Father of Los Angeles harbor."

The Banning mansion was built in 1864. It has 24 rooms, although there originally may have been as many as 30, with at least 3 barns in the rear. The mansion, praised as "the finest extant example of Greek Revival style in southern California," has stately columns and wide verandas. The 3-story structure is topped by a cupola from which Banning scanned the horizon in search of ships entering his port. Banning ordered material from all over the world, including exquisitely colored Belgian glass and delicately veined Belgian marble.

Lumber was brought by ship from the Mendocino coast and labor was supplied by local Indians, seamen, and shipwrights. The legendary hospitality was unsurpassed in its day, and the Bannings became famous for their "regales," attended by leaders of civic, governmental, business, and military affairs. Twenty-acre Banning Park, in which the mansion is located, was created by a bond issue voted by the people of Wilmington in 1927, 2 years after the last of the Bannings moved out of the home.

The Banning residence is California State Historical Landmark No. 127. It was honored by a commemorative plaque placed by the Native Daughters of the Golden West in 1937. In 1963 the landmark was declared Los Angeles

Historic-Cultural Monument No. 25, and in 1971 was approved by Congress for the National Register of Historic Places. The Banning residence is a facility of the Los Angeles City Recreation and Parks Department, open to the public on Wednesday and Sunday afternoons. Restoration of the house, gardens, and coaching barn has been the work of the Friends of Banning Park; financial assistance from the State is anticipated. Some of General Banning's furniture has been preserved, and many of the rooms have been restored with elegant furnishings from the later 19th century. From the "Widow's walk" of the beautiful structure, visitors still enjoy a superlative view of the harbor area. Each April, Banning Park becomes the site of an annual wisteria festival.



General Phineas Banning residence.

30. St. John's Episcopal Church

Wilmington's first Episcopal services were held in the basement of the Banning mansion in 1876. Seven years later, through the encouragement of Mrs. Mary Hollister Banning, construction of a stave-type church building was begun at 422 North Avalon Boulevard (then called Canal Street). The Rev. Carlos S. Linsley did most of the carpentry work himself, and the Banning family paid for most of the materials. Christmas day services were held in 1883 in the still unfinished church. Despite this auspicious beginning, construction slowed to a standstill and the edifice stood without a roof for 4 years. During this time religious services were conducted in a building formerly housing the Washington Saloon.

The church's bell and altar provide further evidence of the Bannings' close association with St. John's. In 1882, before construction had commenced, General Banning donated the bell, which came from the S. S. Amelia, one of his harbor channel boats. Many years later, in 1925, Banning's heirs donated the Catalina marble altar which originally had been intended to serve as a buffet in the Banning home. St. John's altar cross and altar rail, gifts from a Navy chaplain in 1926, were made at Pearl Harbor from the brass of a German World War I submarine.

In 1943 the church building was moved from its original site to its present location at 1537 Neptune Avenue in Wilmington. With the exception of a small parish hall added at the rear in 1950 and a few of its stained-glass windows, which have buckled with age, the unpretentious appearance of the church is the same as when the church was first constructed.

It is recommended that a commemorative plaque be placed at 422 North Avalon Boulevard to mark the original and historic location of St. John's Episcopal Church.

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- 4. Clarence Matson, Building a World Gateway, p. 39.
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3-7. Fort MacArthur Upper Reservation Site

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Colonel Robert L. Freeland, Deputy Post Commander, Fort MacArthur, has contributed maps, photos, a draft history of the fort, and his time in helping with this section of the report.

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